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ABSTRACT

This document is comprised of the four 2000-2001 issues of a quarterly journal for teachers and parents of children in Montessori infant and toddler programs. The Spring 2000 issue presents articles on introducing cultural subjects to toddlers and on the influence of early experience on brain development. The Summer 2000 issue includes an article on developing an infant all-day community and Part 1 of an article on the Resources for Infant Educarers (RIE) organization, incorporating the philosophies of Magda Gerber and Emmi Pikler regarding residential nurseries. The Fall 2000 issue contains Part 2 of the RIE article and an article on introducing parents to Montessori theory and educational practices. The Winter 2001 issue focuses on how brain research validates the theories of Maria Montessori. Regular features include "Ask Ginny," an advice column, as well as editorials and job announcements. (KB)

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Infants and Toddlers, 2000-2001.

Lillian DeVault Kroenke, Ed.

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Numbers 1-4

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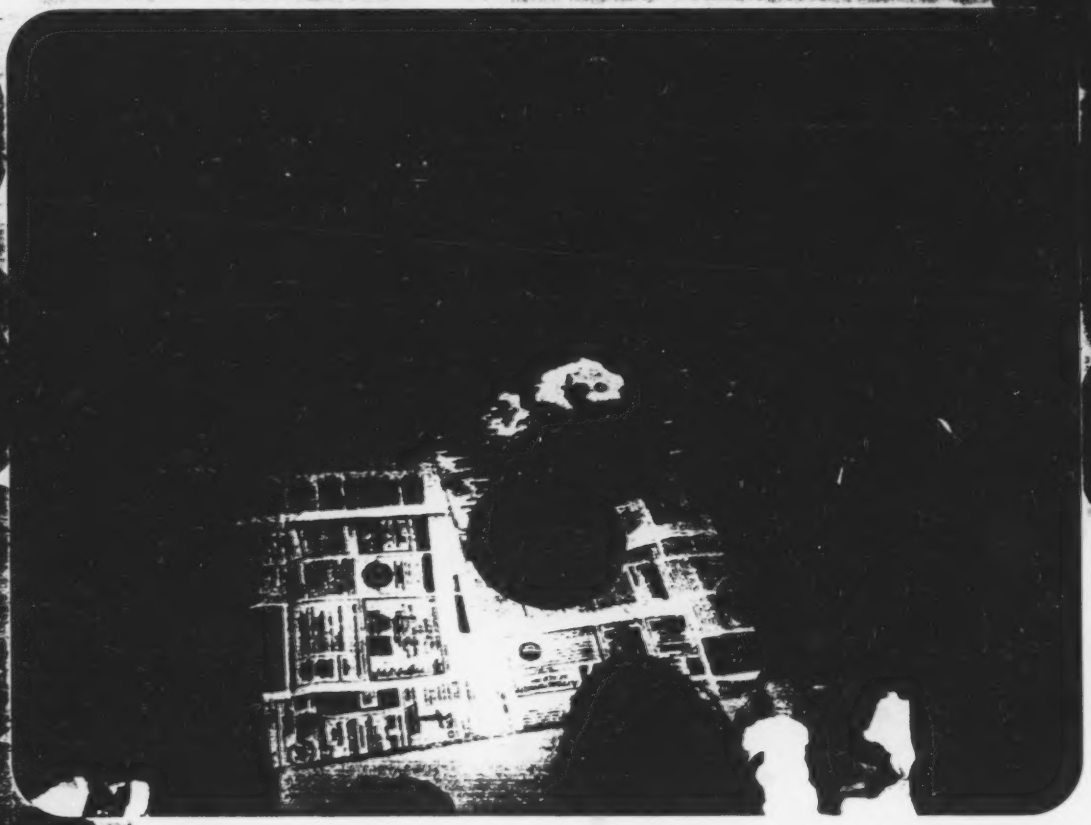

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Infants and Toddlers

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Editor: Lillian DeVault Kroenke

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Editorial

Face to Face

For four weekends out of five in March and early April, I traveled to teacher conferences in Houston, New York City, Seattle and San Diego attending as many Infant/Toddler presentations as possible and displaying my wares at the Elanbe Publishing Services booth. Whenever possible my husband and editor, Bill, accompanies me and assists at the booth.

This year I was pleased to meet many of you who subscribe to *Infants and Toddlers*. You have been very kind to let us know how much you appreciate and enjoy *Infants and Toddlers*.

Unfortunately, we have been so busy at our booth, I have had little or no time to visit with you.

Almost at the end of the AMS Annual Seminar in New York City, it finally dawned on me to ask some of you to write your comments down so I can share them with all of the subscribers to *Infants and Toddlers*.

Here they are.

Lillian DeVault Kroenke

Letters to the Editor:

"Thank you for publishing such a great journal for professionals in the field."

Mary Ellen Kodas
Valley Montessori School
Livermore, CA

"Great publication! Our parents love *Infants and Toddlers*."

Mary Beth Sullivan
Bulk Mail Subscriber
New Gate School
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"I enjoy receiving *Infants and Toddlers*. I've shared the articles with colleagues and parents. My goal is someday to contribute an article."

Kate Roden Dreffin
Toddler Coordinator
Crystal Lake Montessori
Woodstock, IL

"I've had a subscription for one year and have ordered some back issues. I use the articles as resources for my parents. The articles are both helpful and reassuring."

"I love the ***Ask Ginny*** column!"

Dotty Weaber
The New School
Lancaster, PA

Ask Ginny... by Ginny Varga

Q As the two-year-old's third birthday approaches, teachers, parents and administrators often ask, "How do you know if a child in the toddler class is ready to move into the early childhood class (3 to 6 years)?

A For most children there isn't a question. You just know that the child is ready.

So what is it about some children that leads us to ask the question about readiness? Is it something about their overall appearance or behavior, their coordination, their difficulty in leaving their mothers, delay in the ability to use the toilet, inability to communicate needs, a fear of other children, aggressive behavior, lack of sufficient independence or a general delay in what may be considered age-appropriate behavior?

Often it is the toddler's teacher who questions the child's readiness and recommends that the three-year-old remain with her for an extended period of time. I have heard teachers say that they need more time with the child, to bring the child up to the skill level of other children in the class.

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Introducing Cultural Subjects to Toddlers

By Patricia Chambers

We all live very busy lives so I'd like to begin with this somewhat lengthy, yet powerful, relaxing and lyrical passage from *The Spell of the Sensuous* by David Abram.

"Humans are tuned for relationship. The eyes, the skin, the tongue, ears, and nostrils—all are gates where our body receives the nourishment of otherness. This landscape of shadowed voices, these feathered bodies and antlers and tumbling streams—these breathing shapes are our family, the beings with whom we are engaged, with whom we struggle and suffer and celebrate.

"For the largest part of our species existence, humans have negotiated relationships with every aspect of the sensuous surrounds, exchanging possibilities with every flapping form, with each textured surface and shivering entity that we happened to focus upon. All could speak, articulating in gesture and whistle and sigh a shifting web of meanings that we felt on our skin or inhaled through our nostrils or focused with our listening ears, and to which we replied—whether with sounds, or through movements, or minute shifts of mood.

"The color of sky, the rush of waves—every aspect of the earthly sensuous could draw us into a relationship fed with curiosity and spiced with danger. Every sound was voice, every scrape or blunder was a meeting—with Thunder, with Oak, with Dragonfly. And from all of these relationships our collective sensibilities were nourished.

"Today we participate almost exclusivelly with other humans and with our own human-made technologies. It is a precarious situation, given our age-old reciprocity with the many-voiced landscape. We still need that which is other than ourselves and our own creations. The simple premise of this book is that we are human only in contact, and conviviality, with what is not human.

"Does such a premise imply that we must renounce all our complex technologies? It does not. But it does imply that we must renew our acquaintance with the sensuous world in which our techniques and technologies are all rooted.

"Without the oxygenating breath of the forests, with out the clutch of gravity and the tumbled magic of river rapids, we have no distance from our technologies, no way of assessing their limitations, no way to keep ourselves from turning into them. We need to know the textures, the rhythms and tastes of the bodily world, and to distinguish readily between such tastes and our own invention.

"Direct sensuous reality, in all its more-than-human mystery, remains the sole solid touchstone for an experiential world now inundated with electronically-generated vistas and engineered pleasures; only in regular contact with the tangible ground and sky can we learn how to orient and to navigate in the multiple dimesnsions that now claim us." (Abram, 1999).

This incredibly beautiful passage speaks to something that is vitally important to all of us.

Earlier this year (1999) there was a front page article in the newspaper announcing that there are now more than six billion people on the earth, a number that increases daily.

Our resources are limited. The earth is our home and at this time there is nowhere else to go. Yet daily we are destroying it in both large and small ways.

Corporations preoccupied with profits and working tirelessly to keep their stockholder happy, assault the earth chemically and structurally.

And what about us? How often do we choose a toxic cleaner at the grocery store or spray toxic pesticides or herbicides in our homes or yards? Or how often do we fail to recycle, all because it seems to make our lives a little easier in some way. We are even aware many times that we are destroying our homes, the homes of our children and their children.

We must develop "Earth Regard"—an appreciation and an attitude of respect for nature and all living creatures—that we share with the children. The toddler years are not too soon to begin.

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INTRODUCING CULTURAL SUBJECTS

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As you read this, please be aware that my teaching experience is with two-year-olds only. In the State of California, we have licensing options. Two-to-six-year olds represents one grouping but we can opt to include 18 month olds too. The licensing requirements for the latter, however, are restrictive for Montessori programs.

A Nature Curriculum for Toddlers

A few years ago I was visiting an intern in Park City, Utah. The director of the school, who was also a primary teacher, asked me why we didn't have a cultural curriculum for toddlers.

There have been a few times in my life when I've been surprised to find that I'd missed something very obvious. This was one of those enlightening and at the same time, embarrassing moments.

Nature curriculum involves all the developmental domains. It is a fantastic opportunity for the young child. We now know that the sensitive period for learning compassion is between 18 months and 3 years. At this time, there is a growth in consciousness regarding the importance of the reciprocal relationship to the health and survival of the individual and the species.

We can readily see the importance of this dynamic in human relationships, but can we also extend our thinking to include a relationship to other living creatures, to nature and to the earth? What might be the consequences to the children in our care if we do not support them in developing the quality of compassion? What are the gifts if we do?

What do we do when we catch an insect? Do we handle it carefully and respectfully? How do we care for the insect? What are its needs? When and how do we let it go? Why do we let it go? And why are these questions important?

Patricia Chambers **was actively involved teaching toddlers even before she received her AMS Infant/Toddler Certification in 1990. She previously earned her Preprimary Certificate in 1980 and her AMS Administrator's credential in 1998.**

Currently, Patricia is Director of Infant Toddler Training, Montessori Education Center, Northern California and Teacher Trainer, College Level, for the Montessori Teacher Education Center/San Francisco Bay Area.

She has extensive teaching experience as a head teacher in two schools and as an Early Childhood Specialist and Consultant. In the process, she has given numerous presenations and lectures.

Patricia holds an A.A. in Early Childhood from Chabot College and a B.A. in Human Development from Pacific Oaks College where she is currently a M.A. candidate in Human Development.

Physical Development

The movement involved in engaging with the environment addresses physical development directly. All that is required to reach, lift, hold, carry or climb an object of interest develops the musculature and the intellect as well.

Years ago, I lived in the Siskiyou National Forest in Oregon on a gold mining claim. Babies were born there and they learned to walk in the woods, in meadows and other naturally uneven surfaces.

There are no straight lines in nature. Did you know that when a ship sinks searchers use technical equipment that looks for straight lines? If they find one, they know that the object is man-made and is, therefore, likely to be the ship.

When other young children came to the claim to visit, they would invariably fall down often because they were used to walking on flat surfaces such as flooring and sidewalks. They had developed their bodies differently.

There is a wonderful advantage to being out in the country or in the vacant lot next door that has rocks and pebbles and little grassy knolls. And those vacant lots with their insects and other creatures are probably richer in opportunities to understand nature than our sterile sand and steel playgrounds.

Language Development

We are involved in language development every step of the way as we name everything for toddlers who, in most cases, are having their very first experience with the subject. We speak slowly and clearly, articulating all the necessary sounds.

We present the material over and over because the toddler is in the sensitive period for repetition. You know this because every day at circle time they ask for the same songs over and over again. They want to sing and say words. They want to be in conversation with you.

The three period lesson for the toddler is an entirely different matter than it is for the primary-age child. Most toddlers are dealing almost exclusively with the first period, wanting to hear the names of things again and again.

They may begin to move into the second period as we ask them to get things or do something. Only the older toddlers can venture into the third period—and then, only when they want to.

It takes an exquisite sensitivity on the part of the teacher to "follow the toddler" while keeping a general goal in mind.

Cognitive Development

Cognitive development is an inherent part of language and physical development, but it can also be observed as the children begin to develop an understanding of how the world works and their own relationship to that world. They are driven by what Montessori calls the intelligence of love.

Why do toddlers pick up a pitcher of water and continue pouring into a cup long after it is full? They want to understand the properties of matter! What is gravity? What is volume? Where does this water go when it leaves the tray that is under the pitcher?

There is a vital impulse in the toddler to understand how the world works in relationship to themselves and to everything in their environments. Understanding nature is fundamental in this quest.

Lena Wickramaratne tells us, "The natural habit of man is the world of nature. We live in a conceptualize world, which Dr. Montessori often reminded us. She tells us that one of the wonderful things that happens in a healthy development is that we learn how to change our world in ways that make us more comfortable and more productive.

"Nature is what really supports the child's life and generates the artificialities of his own making that he gathers around him." (Wickramaratne, 1976).

These words are profound. As we begin to recover as a society from the excesses of the dominator model that was a prevailing dynamic of the

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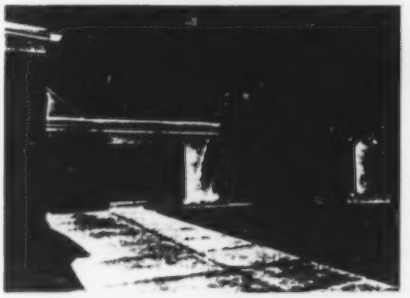

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INTRODUCING CULTURAL SUBJECTS

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Industrial Revolution, we also begin to see the vital importance of a relationship to the earth, our home and our tools for creating the future.

Referring to the Wild Boy of Averyon, Dr. Montessori suggested a possible relationship with nature that I certainly don't have and I think very few of us ever have.

"The wild boy...freely ran and roamed in the woods...(He had to be taught how to walk). He ran with ringing shouts of joy (which had to be toned down to a speaking voice). The sensitivity with which the boy was attuned to the sun emerging from the clouds, the windstorm swaying in the trees, the falling of snow, all of which made him break into shouts of laughter as if almost convulsed with joy.

"The boy whilst living his life of terrible abandonment found happiness in it. He had almost been absorbed as part of nature in which he delighted. Rain, snow, tempest, boundless space had formed his spectacles, his companions, his love."
(Lane, 1979).

I was raised in a noisy household in a noisy city. I do not consider myself to be a ***nature person***. I am a ***book person***. I don't go backpacking. I don't go hiking. I will probably never invite you to go for so much as a walk. I read books. I invite you to tea in my warm, dry living room.

But, the fact is that my fondest memories of childhood all took place out of doors. We used to visit Grandma Mix who lived in the country. She was not really my grandma and yes, she was the sister of the famous cowboy movie star of the 50's, Tom Mix. I'd stay in the woods and go fishing all day.

Or we'd visit my Aunt Rita who as a nun, lived in a convent surrounded on three sides by porches and thirty rocking chairs—all of which we had to test on every single visit! The house was in a wooded area and as soon as my brother, my sister and I said our how-do-you-do's, we headed straight for the creek in the back. I remember another relative and another vacant lot and how happy I always was in those places.

The Need to Belong

I think that, by nature, we all want to live in harmony with the earth. We know that the most primal need that a child has is the need to belong. The accompanying fear of abandonment is the reason our babies want to sleep in our beds at night. It's the reason that, when we are encouraging them to sleep in their own beds, we go to their bedroom door every ten minutes to assure them. We tell them, "I know that this is hard for you but I'm right here and I'll come to check on you again in another ten minutes."

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The Influence of Early Experiences on Brain Development

By Carole Wolfe Korngold with K.T. Korngold

Your baby cries in the night; you respond immediately, picking her up and holding her in the cradle of your arms. As you feed her, you gaze into each other's eyes. Nature has seen to it that when you hold her in your arms, the distance between your eyes and the baby's are exactly the distance in which she can focus. Zap! A neuron from her retina makes an electrical connection with one in her brain's visual cortex.

You gently touch a baby's palm with a wooden rattle. She grasps it, drops it and you return it to her saying softly, "Here is your wooden rattle." You smile. She drops it again and reaches for it herself.

Crackle! Neurons from her hand strengthen the connection with those in her brain's sensory-motor cortex.

Your toddler has just figured out how to control the pitcher so that her milk doesn't spill, and when it does she knows where the sponge is to wipe it up.

Crackle! Neurons from her hand strengthen their connection to those in her brain's sensory-motor cortex.

Your young child is having trouble with transitions at school and cries out for his mommy. His teacher kneels down, her face reassuring and close to him, so he feels she is there for him. "I know you miss your mommy. Here is her picture. Who is that a picture of?" He answers, "My mommy." "That's your mommy,

and when does she come to pick you up?" "When I'm on the playground," he answers as he goes down the stairs with the other children. Zap! Neurons in the brain send pulses of electricity through the circuits that control emotion.

The Importance of Interaction

Each time you interact with a child you are physically affecting the growth of the brain! Dr. Marian Diamond, author of *Magic Trees of the Mind*, writes that, "Given the appropriate mental, physical and sensory stimulation, the brain's interconnected neurons sprout and branch." Diamond's notion is profound. "The brain grows with deliberate stimulation.... This is a life transforming idea: enrich your own experiences and enlarge your cerebral cortex; deprive yourself of stimulation and the brain will shrink from disuse."

As parents and teachers, we need to ask ourselves what are the implications of enrichment for children's rapidly developing minds? How does experience sculpt the child's brain and influence his or her future? What is best for each child's individual temperament?

The Brain at Birth

When a baby comes into the world, her brain is a jumble of neurons all waiting to be woven into the intricate tapestry of the mind. Some of these neurons have already been hard-wired by genes in the fertilized egg, but trillions upon trillions are more like the chips in a computer before the factory pre-loads the software.

They are pure and have almost infinite potential—unprogrammed circuits that might one day compose symphonies, solve complex equations using calculus, erupt in fury or melt in passion.

When the neurons are used, they become integrated into the

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INFLUENCE OF EARLY EXPERIENCES

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circuitry of the brain by connecting to other neurons. If they are not used, they may die. It is the experiences of very early childhood that determines which neurons are used to wire the different circuits of the brain. It is the experience that the infant or toddler has in our environments that affect the growth of the brain.

The Importance of Experience

I was invited to participate as a member of the White House Conference entitled *What New Research on the Brain Tells us About Our Youngest Children*. As host of the conference, Hillary Clinton stated, "The experiences a child has determines whether the child grows up to be intelligent or dull, self-assured or fearful, articulate or tongue-tied."

Early experiences are so powerful," says pediatric neurobiologist, Harry Chugani, from Wayne State University, "that they can completely change the way a person turns out." Research shows that human development hinges on the interplay between nature and nurture.

Nurture and Nature

In her study, *Temperament as a Factor in Normal and Pathological Child Development*, Stella Chess, M.D. tells us that nature is the individual genetic endowment that human beings are born with. The temperaments we are born with are the same that we have as adults. Some of us are outgoing and some of us are more introverted. Some of us are very active and some of us are slower-paced. Some of us are slow to change and some of us jump right into change.

Nurture, by contrast, is the nutrition, the surroundings, the care, the stimulus, the experiences, and the teachings that are provided or withheld. We believe that the impact of environmental factors on a young child's brain development is dramatic and specific, not merely influencing the general direction of development, but also actually affecting how this intricate circuitry of the human brain is wired, how it actually grows.

Current technology now actually allows us to see how this impact changes the physical growth of the brain through new experiences, repetition of experiences and stimulation. These experiences are critical for the production of new neurons and especially for the creation of these connections.

Forming Brain Connections

So, how do brains form connections? In 1994 the Carnegie Task Force on Meeting the Needs of Young Children published *Starting Points: Meeting the Needs of Our Youngest Children*. They stated that the human body is entirely made up of cells. You and I have lots and lots of cells and the brain is no exception. Before birth a baby's brain cells multiply at an astonishing rate. By the time the baby is born, she will have one hundred billion brain cells. The cells become connected as the brain matures.

The networks formed by these brain cells are critical. Among other things, they allow thinking and learning to take place. Given the importance of these networks, why do babies begin life without them?

The unfinished brain offers an important benefit to a baby and to the baby's culture. It lets the baby form a network of brain cells in direct response to her culture. In other words, babies in Japan, babies in El Salvador, babies in Israel learn not only the language of their family and caregiver but also the norms of their culture.

The Importance of Connections

Does it matter when these connections are formed? Connections are the miracles of the human body. Experience shapes the way the circuits are made in the brain. From birth, the brain is rapidly creating these connections. By the time a baby is three, her brain has formed over a trillion connections —about twice as many connections as adults have.

A baby's brain is super dense and will stay that way through the first ten years of life. Beginning

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around the age of eleven, the child's brain starts getting rid of the extra connections, gradually making order out of that thick tangle of wires. So, first you fill the brain up. Then the brain starts eliminating connections.

Sensitive Periods

Dr. Maria Montessori didn't have access to the technology of the neuroscientists that we have today to look into the brain. Yet, by observation, Dr. Montessori was able to come to the same conclusions that scientists are coming to today.

Dr. Montessori's knowledge of the sensitive periods has been further validated by current research. This research confirms her knowledge that the human brain does have a tremendous capability and a capacity to change. As educators, we know that timing is crucial.

The conference, *Learning and the Brain*, held in November 1999 at Harvard, confirmed the idea that learning does continue throughout the life cycle with **optimal periods** that we in Montessori call **sensitive periods**. The implications of this research are tremendous. It reaffirms the work that we have been doing and the practice we have followed since the first Assistance to Infantcy course in Rome, Italy, in 1949. Modern technology confirms what Dr. Montessori knew and implemented in her infant and toddler environment.

The White House Conference on Early Childhood Development referred to ***prime time*** as periods of development. In the neuro-biological literature, these periods are called **critical periods**. In 1997, Time Magazine and Newsweek each published special editions based on the young child from birth to three. Both magazines called these periods of time ***windows of opportunity.***

This information supports the recognition of sensitive periods as the time in which the brain is particularly efficient at specific types of learning. Now is the time for us to reach out to the community with what we have

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INFLUENCE OF EARLY EXPERIENCES

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established as appropriate and viable, both physically and psychologically, for the very young child.

Retaining Connections

How does the brain know which connections to keep? According to Rima Shore of the Families and Work Institute, this is where early experience comes into play. When a connection is used repeatedly in the early years, it becomes permanent. In contrast, a connection that is not used at all, or not often enough, is unlikely to survive. For example, a child who is rarely spoken to or read to in these early years may have difficulty mastering language skills later on. By the same token, a child who is rarely played with may have difficulty with social adjustment as she grows.

Everyday Actions Transform

We must realize that everyday actions of being with an infant or a toddler are now transformed. For instance, when you decide to let an infant cry and do not respond to him, the implications are tremendous. Infants can be very active in getting their needs met. We must not negate the importance of all this, for it lays the groundwork for healthy psychological development.

Let me give you two scenarios. In the first scenario, a baby is feeling the stress of hunger. He makes his need known by crying. The adult responds and feeds him. He is fulfilled and falls back to sleep. In the second scenario, a baby cries in the night. There is no response. His needs are not met. He no longer cries. The baby is learning not to trust. This environment does not meet his needs. He may become self-sufficient but he may not trust the world.

Early stress activates hormones that can impair learning and memory. Children under stress may develop intellectual and behavioral problems. How do you distinguish between stimulation and stress? No doubt it is stimulating to the extreme to grow up in a war zone with guns firing or next to an airport with a high level of noise. We understand this kind of extreme situation. What about subtle stimulation? For example, bright spinning crib objects, loud rapidly read nursery rhymes, or the verbal bombardment of adult language. Doesn't this result in its own kind of stimulation abuse?

We need to provide loving, calm, responsive environments with meaningful experiences and ample time for children to experience and explore.

The gift of time is a treasure that we can give to our children. What quality Montessori childcare can give is a gift of unhurried, gentle time that is geared to the needs and natural rhythms of each individual and unique child.

Carole Wolfe Korngold...

is well known in Montessori circles as the Director of the Center for Montessori Teacher Education/New York (CMTE/NY). Carole co-hosted the Montessori International Congress in Rome, Italy, in November, 1996. She is a past president of the American Montessori Society.

This year Carole was recognized as AMS's Living Legacy at their 40th Annual Seminar.

Carole was instrumental in founding The Early Learning Center in Albany, NY, where her children started, and Westchester Day School in Mamaroneck, NY.

Carole holds both AMS Infant/Toddler and Early Childhood certification. She received her Bachelors from Syracuse University and her MEd from Manhattanville College, NYC.

References:

1. Diamond, Marian, *Magic Trees of the Mind: How to Nurture Your Child's Intelligence, Creativity and Healthy Emotions from Birth through Adolescence*, Penquin Putnam, 1999.
2. Chase, Stella, *Temperament as a Factor in Normal and Pathological Child Development*, 1977.
3. Carnegie Task Force on Meeting the Needs of Young Children, *Starting Point: Meeting the Needs of Our Youngest Children*. 1994
4. Harvard University Conference, *Learning and the Brain: Using Brain Research to Reshape Classroom Practice*, November, 1999.
5. White House Conference. *Early Childhood Development and Learning: What New Research on the Brain Tells us about our Youngest Children*. April, 1997.

INTRODUCING CULTURAL SUBJECTS

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It is also why the Practical Life curriculum is such a success in the toddler environment, not just because the children are happy to be learning the skills that Mommy and Daddy have. These skills provide an opportunity to secure their belongingness.

Belonging with dignity means making a real contribution. Toddlers don't really want as their first choice to cut a wooden or velcro carrot. They want to make and serve you a real salad.

I believe that the toddler has—that we all have—somewhere in us the same need to belong to the environment as well, and to be in active, if not necessarily conscious, relationship with it.

We are always in some relationship to our environment. And our environments are ever widening circles of relationships —first the child and the mother, then the child and the immediate family, then the child and the extended family, the neighborhood, the school, the community, the country, the earth. But the earth underlies and supports all these other relationships, adding to its fundamental importance to us.

Montessori was a master at looking at simple principles of the material world and relating them to profound spiritual or social/emotional dynamics. I can only begin to dream about a conversation with her on the topic.

The Responsive Environment

Those of you who started out in the primary classroom as I did will remember the Nature Shelf, a place where the children could display the interesting and beautiful things that they found outside. You must provide this for the toddler as well.

First, consider safety. Don't bring in anything that might be diseased or toxic. These younger ones still put things in their mouths. Choose a special place in the room, somewhere peaceful and relatively quiet. This place might be a wonderful space for the child who is upset or needs a little time alone.

Remember to keep the space very, very clean. The things that we bring in from nature tend to decompose so check them daily. Tidy up as needed. Consider a designated table with a tablecloth and a vase of fresh flowers as the standard. Start from there and build, adding beautiful or interesting things such as rocks, pine cones, leaves or an insect habitat.

If you don't have the space for a designated table, consider a beautiful basket. Put a small piece of fabric into the basket for the children to roll out onto their workspace. Then add flowers and rocks, etc. For the toddler, three items would be a good number to have in the basket.

Nature Can Nurture

Some years ago, Dee Coulter, a Ph.D. Neurologist from the Naropa Institute in Colorado, came to visit our demonstration infant class. The class was located on a small carpeted area in a very large room.

We had one little one who just ran and ran for days, never settling or concentrating for more than five seconds. When we asked his mother if she ever sang to him, she replied that she did so very often and that she always changed the words of the songs!

Dee suggested that we bring in a sheep skin rug, some seashells and other objects from nature. One of our student teachers was just learning to play the recorder and we asked her to sit in the corner and play Twinkle, Twinkle Little Star, which she did—over and over again.

The child came in running as usual that first morning. Soon he noticed the music and his body began to slow down even as he continued to cover a lot of territory. Slowly, he got nearer and nearer to the music. Then he sat down right in front of the intern and just listened for quite some time. His mother commented that this was unusual for him.

After a while, he got up and went over to the sheepskin rug and began to play with the seashells and the rocks. You could see calm come over him. The music which was live and therefore, rich

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INTRODUCING CULTURAL SUBJECTS

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with vibration, soothed him. The natural materials calmed him further. There were many other things in the room but he stayed with the natural materials.

Dee said that science tells us that all living matter vibrates at different frequencies and that this is also true of the parts of the human body. So some things in nature, as well as music, are vibrating at the same frequencies as some parts of the body. When there is imbalance or disorganization, the frequencies may alter. The presence of these natural objects can be very soothing and may help return the organism to equilibrium.

Bringing Nature Into Our Classrooms

A bug viewer with a small magnifying glass is a must. You don't have to have anything fancy. Restaurant supply or discount stores have plastic wide-mouthed drinking cups that also have lids. Put the lid on, poke air holes into the lid and turn the cup over for excellent viewing! One ant in a cup can be the catalyst for much conversation and learning.

We have an animal from each phyla in the classroom, a goldfish, tadpoles, a newt, a bird, and a guinea pig. Our tank has three fish. The children often stand in front of the tank. But when we discuss fish at the circle, I bring just one of them in a smaller bowl to limit distractions.

If you don't feel comfortable with the presence or care required to keep these animals, you can always borrow one from a primary class and then return it after your presentation.

Preparing the Presentation

Also for presentations, we have a critter corral to keep both the critter and the children safe. We used to cut down paper boxes, but now we have four pieces of pressboard that each measure about 12 inches by 40 inches. They easily join to each other with plastic joints that we purchased from a hardware store. Newspaper makes a good floor since the corral is only up for very a limited time.

When we are through, we disassemble the corral and slide it easily behind a table. This arrangement makes a very flexible environment and the children can observe animal behavior very closely.

Before you handle animals, make sure that you wash your hands

to protect the animal. Wash again after to protect yourself and the children.

The National Science Teachers Association publishes A Code of Practice for Animals in a School. These guidelines should be shared with your staff and followed very closely.

The Presentation

We begin by presenting toddlers with information and experiences

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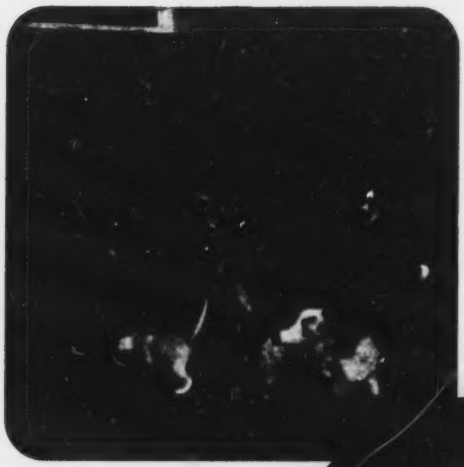

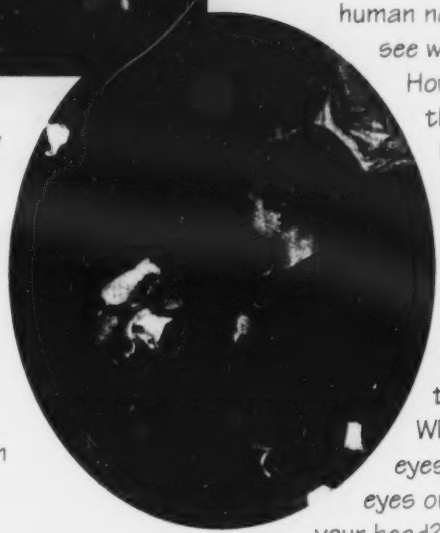

of animals and insects that they might actually observe such as cats and dogs, bunnies and ducks, frogs and butterflies. And, of course, there are flowers and plants. We have an apple tree in our backyard.

We don't, for example, study walruses, polar bears or anteaters. Start with the concrete, something that the toddlers can experience first hand.

Before we bring an animal into the corral, we inform the children of our intentions and ask them to be very quiet so they do not scare the animal. They have had exposure to the silence candle so they have some idea of what it means to be peaceful. It is a compassionate gesture to the animal and a learning opportunity for the child.

We then say to the children. "This is a rat. Can you say rat? Let's take a close look. Let's take a quiet look." Soon we start to articulate our observations. "What color is the rat? How many feet does he have?" We count together. "How many feet do you have? He's different than you, isn't he?"

Think in terms of the children's human needs. "Can you see what he eats? How does he do that? Where is his mouth? Does he hold his food? Does he put his mouth into the food? Do you do it that way? Where are his eyes? Are your eyes on the top of your head?" Gesture with your hands.

This is possibly the first time that the toddlers have ever seen a rat so they have no prior information to access. Everything is a guided observation.

Typical Toddler Responses

The toddler's observation will not always be accurate. They will sometimes say wonderfully outrageous things. You can respond with, "Really, do you think so?" Never do or say anything that will embarrass or insult the child. Honor their ideas as much as possible. Support spontaneous thinking so they may always be able to "think on their feet."

Toddlers will very often respond to your questions with what is called an anthropomorphic conclusion. This basically means that they see the animals needs in terms of their own experience. "He wants his mommy." Or, "He wants to eat cookies." Take advantage of that perspective. Let those needs guide your questions.

Don't make the mistake of trying to start your zoology presentations by teaching the toddler about living and non-living as we do in the primary classes. Remember Piagetian theory. Anything that moves is alive, such as a car or a flag waving in the wind. Chairs are alive because

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they have arms and legs. They are not ready for this distinction yet. Don't even go there.

If you are concerned that your children will not be respectful to the animals, you can create a box barrier around the cage or tank on the shelf with clear Plexiglas and silica gel to hold the panels in place.

Caring for Animals

The children love to care for the animals so we keep enough food for one day in an opaque film canister. With some of the

animals such as the bird, the teacher will be on hand to open the cage and oversee the activity. But for creatures such as the fish and newts, the food for the day is left out and the children can feed the animals independently.

My Objective in Writing

My objective with this writing is to inspire you to go into your classrooms and begin a focused nature curriculum. My hope is that we come together some day when we can share our experiences to become more creative and comprehensive about our approach.

If an animal has given us a wonderful experience by coming into our classroom and living in confined quarters, we should honor that animal in the best way that we would any guest.

The attitude that we bring to these experiences is extremely important to help the child develop compassion and "Earth Regard." By sharing this respectful approach with the children, we create opportunities for them to begin to generalize their experiences of compassion to animals, plants and to all of nature. In doing so, they experience a relationship to nature that can nourish their spirits and souls.

"And such is our duty toward the child: to give a ray of light and to go on our way."
Maria Montessori

References:

1. Abram, David, *The Spell of the Sensuous: perception and language in a more- than-human world*. Preface. Pantheon Books, 1999.
2. Wickramaratne, Lena,. *The Child in Nature*. N.A.M.T.A. Quarterly. Vol. 2, No. 2, (1976).
3. Lane, Harlan, *The Wild Boy of Averyon*, Harvard University Press, 1979.
4. *The Code of Practices for Animals in a School*, National Science Teachers Association, 1840 Wilson Blvd. Arlington, VA 22201-3000. www.nsta.org.

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ASK GINNY

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The idea of prerequisites, evaluation and promotion is the basis for evaluating readiness in traditional elementary school—not in Montessori schools. Teachers often believe that their teaching ability will be judged by the behaviors of the children who come from their class. Therefore, they would like more time with the child.

Nancy Rambusch once told us that readiness is a question related to the teacher—is the teacher ready for the child? She went on to say that children are always ready. The real question may be "Ready for what?"

A child may not be ready to meet the expectation of the next teacher. Teacher expectations of children vary greatly, even in Montessori classrooms. The teacher's expectations are influenced by her knowledge or lack of knowledge of human development, past experiences, her personal beliefs and values as well as her understanding and level of acceptance of Dr. Montessori's theory and practices as they relate to how children develop into competent, confident and healthy human beings.

I remember the time before toddler classes were established when children of 2 1/2 routinely entered the early childhood class. I am personally inclined to favor moving the three-year-old in question.

...readiness is a question related to the teacher—is the teacher ready for the child?...children are always ready. The real question may be "Ready for what?"

If there is more than one class, a wise administrator will talk with the staff and place the child with the teacher who is the most confident of her own abilities, who is flexible, accepting and understanding of individual differences in children.

I would not necessarily place the child with the teacher who has

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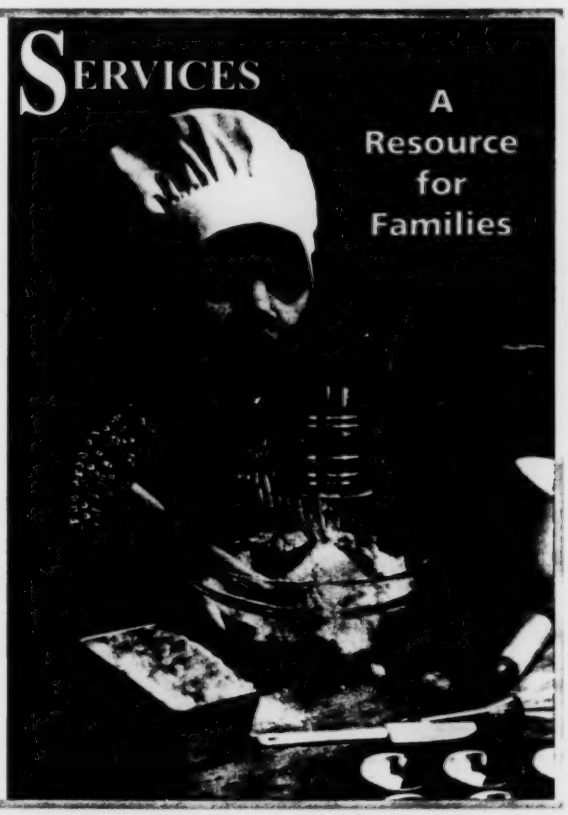

ASK GINNY

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been teaching for over ten years, nor would I place the child with a first year teacher if I had a choice.

A very experienced teacher may have her routines and procedures so in place that if a child doesn't quite fit her expectations, the child may not be given the special kind of attention needed. The older, experienced teacher may have lost the ability to see the child's hidden potential or lack the extra energy it requires to assist and support this particular child's transition to the new class.

The new teacher should have as much positive information about the child as possible. She should observe the child in the toddler environment, meet with the parents and develop a plan for easing the transition of the child in question to the older class.

It may be helpful to shorten the time in the beginning so that the new teacher will feel good about taking time to observe and follow the plan for transition but not feel that she is neglecting the other children.

One could, for example, have the younger child continue for a short time to have lunch or nap in his or her own toddler class. There are many creative options when developing an individual plan to support a child's successful adjustment. It is most important for the child to feel loved and respected.

Often the child in question responds well when placed in a class with older children. In fact, the child may need the structure, the expectations, the order and the precision available in the early childhood program.

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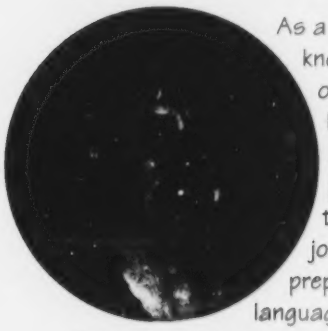
Editorial

We Are Moving!



As a few of you know, I work out of our home in Albuquerque putting together the journal, preparing language materials for early childhood programs and writing some materials for adults teachers. This is my official retirement work.

By the time you read this, my husband Bill and I will have broken ground for our new home in Placitas, New Mexico, which is about twelve miles as the crow flies north of Albuquerque, on the north side of the Sandia Mountains. Our target date for completion and our move is early next year. I will continue to work out of our home in an enlarged office and storage area looking out to the north/northeast at the mesas and mountains in the distance from on top of our foothill.

The important information for you is that our mailing address has changed effective now! Please take note. (You may also use our previous address and phone numbers throughout 2001 as we gradually transfer everything to our new digs.)

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Lillian DeVault Kroenke

Ask Ginny...

by Ginny Varga

Q How do you know a child is ready to learn to use the toilet?

A There has been a lot written on the subject so it is interesting that this is still a question. Could it be that many children do not meet the expectations of adults or at least not quickly enough? Consequently, parent and teachers may then feel they have either not identified or misidentified the readiness cues? Just as it takes a parent and child to bond and eventually to separate, both parent and child must be ready for toilet learning if it's to be a pleasant and successful experience. As with all readiness, it depends as much on experience as on physical and emotional maturation.

Theoretically, the preparation for the eventual success in using the toilet can begin at birth. That is, if the infant is placed in cotton diapers, which permit the evaporation of the urine, the infant can experience the changes in temperature and has the possibility of developing greater sensitivity to the difference between feeling wet and dry. Pampers keep the infants' bottom warm and possibly more comfortable so the child may not indicate an awareness of urinating or of needing changing. As a result, parents and caregivers may not be alerted to changing the infant as often as desirable.

For young children, seeing adults and other children use the toilet helps them to know what the toilet

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Developing an Infant All-Day Community

By Ginny Cusack

I would like to present some thoughts, ideas, and areas to consider when starting an Infant program. These ideas are based on the Princeton Montessori School experience and my personal experience starting an infant program before coming to Princeton. These issues include a historical perspective of Princeton Montessori School's infant program, the issue of a full-day program, staff qualifications, staff and children's schedules, communication, space and materials.

Full-Day Programs

When we talk about infant programs, we first need to address the issue of full-day programs—those that run all day, five days a week, twelve months a year. For many Montessorians, full-day programs are not part of the American Montessori experience.

When Montessori was reintroduced in the United States in the late fifties, it was a time when mothers stayed at home with their children and the nursery school or preschool experience was emerging and becoming popular. This two-to-three hour nursery school experience served to help with a child's socialization skills and gave mothers some time away from their children.

The half-day nursery school model of Montessori was not rooted in Montessori philosophy. Instead, in this cultural milieu, the Montessori method from the Casa de Bambini was incorported into the American model of a half-day nursery school experience.

Almost fifty years later, we are going back to Maria Montessori's original Casa de Bambini's model when children were cared for and taught in an all-day setting. In her writings, Maria Montessori described Montessori as a way of life throughout the entire day. She did not visualize her approach as a socialization and educational program for a few hours where the children have their Montessori time and then spend the rest of the day in non-Montessori time with whoever else can take them.

Dr. Montessori did not visualize her approach as a socialization and educational program for a few hours where the children have their Montessori time and then spend the rest of the day in non-Montessori time with whoever else can take them.

A Way of Life

Our underlying philosophy at Princeton Montessori School and Princeton Center for Teacher Education is the same as that of Dr. Montessori at Casa de Bambini. Montessori is a way of life, a way of relating to children with developmentally appropriate educational materials. There is no distinction between Montessori time and non-Montessori time.

No matter what time of day—at nine in the morning, or four o'clock in the afternoon, it is time for Montessori. Whenever there are children with whom to relate, it is Montessori time. The clock doesn't determine Montessori activities. How we relate to children is just as important at five o'clock in the afternoon as it is at nine o'clock in the morning.

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Ginny Cusack is the Director of the Princeton Center for Teacher Education that is located at the Princeton Montessori School, a school with programs from infant through middle school. Ginny also works with staff development and parent education within the school. Previously, Ginny founded Lakeside Montessori Center in Princeton, NJ and was its director for ten years. There she began the first full-day infant program in New Jersey.

Ginny took her Montessori training in Santa Monica, CA where she received an AMI credential in Early Childhood. She holds an MA in Theology from New Brunswick Theological Seminary. Ginny is also a certified Enneagram Instructor and incorporates the study of the Enneagram into the Montessori teacher education program.

Ginny has written articles on many Montessori topics as well as topics related to the Enneagram. She is a speaker and workshop presenter within the US and abroad.

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DEVELOPING AN INFANT ALL-DAY COMMUNITY continued from page 5

The belief that we have Montessori throughout the entire day is at the foundation of Princeton Montessori School's full-day infant program. Full-day programs staffed by Montessori-trained teachers at all the levels were offered before the infant program began.

When I travel around the country and discuss full-day programs, I hear Montessorians say, "Oh, no, we don't have full-day programs. Our parents have nannies." Or, "Our parents only want their children to come half-days." That's not surprising when that is all that is offered. The parents have to make do if full-day programs don't exist.

Each school must examine its beliefs and philosophy as to how they interpret Dr. Maria Montessori's philosophy. Is the philosophy broader than a half-day or three-quarter day nursery school experience? If the school embraces a broader interpretation, it has the philosophical foundation to develop an infant program.

Historical Perspective

One of the primary reasons we began an infant program was our willing infant and toddler staff. Teachers believed in quality infant care and wanted to add the infant component to the already existing toddler program.

In addition, Princeton Montessori School had a parent-infant program that was facilitated by the toddler teachers. Parents, mostly moms, came once a week for an hour and a half with their babies from 0 to 18 months. Expectant parents were also encouraged to attend.

The parent-infant program served many purposes. It laid the foundation for our full day infant program. It was a great way to communicate the Montessori philosophy to parents of the very young who were just starting out and are very receptive to hearing Montessori ideas.

I recently saw an interesting TV commercial. The woman said she was prepared for everything regarding the birthing process. But when the mother actually had the baby, she said something like, "Who tells me what to do now? I got help with all the preparation for the baby ahead of time and now, when I have the baby, you leave me."

After a number of years, the needs of our Princeton community and the teachers changed. There was an increasing need for all-day infant care. The teachers wanted to serve the needs of children before they turned eighteen months when they were eligible for our toddler program. The teachers had the knowledge, the expertise and the experience to provide quality all-day, all year care that was developmentally appropriate for infants.

The Key to Quality and Success

Trained and Willing Staff

Trained and willing staff is the key to the quality and success of our program. When you do decide to begin a program, you need to find people who are willing to be trained and are suited to work with infants. Some people do better with infants than other age levels and some do better with older children.

One of our teachers was teaching a 3-to-6 class when an opportunity came to be in the infant program. She took the training and received her AMS Infant and Toddler certification. She later told me that she didn't know why she waited so long to become an infant teacher. It was her niche!

School heads often ask a 3-to-6 teacher to work in an infant or toddler program. In the infant-toddler community, that is like pressing a hot button. It sends an electrical shock through the community when you do that. We often think that because a 3-to-6 person knows the Montessori philosophy, that this person can teach in an infant or toddler setting. Certainly those who have been in a 3-to-6 program have a lot to bring to the class, but I would be the first to say that even a super 3-to-6 teacher still has much to learn about toddlers.

The Importance of Infant Teacher Education

Adults tend to think that there is not that much to know about caring for an infant, that anyone can do it. But training in infant and toddler programs is essential to a quality program. Without Montessori-educated teachers, there is no Montessori infant program. We believe that, even if they are not going to be certified, everyone working with infants needs to take

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some courses in environmental design, pedagogy and philosophy in our teacher training program.

At our school, almost everybody in each class is trained because the teacher education center is located at the school. However, not everyone who has a credential is a head teacher. Presently, we have two certified experienced infant-toddler teachers, two interns and another completing her course work from training.

What kind of a person should you select? Frequently, we think that the younger adult teachers are best suited to work with the youngest children. My observations are quite different! Place the younger adult in middle school and get that mature, experienced person into the infant program.

In fact, many more mature persons enroll in infant teacher education programs. That is not to say that younger adults cannot be excellent infant teachers. But I do want to you to change the idea that the younger the child, the younger the adult should be.

Objectivity and Self Knowledge

Objectivity and self-knowledge is also very important for adults working with infants. Being able to separate our own child-rearing choices from the choices mothers in our infant program are making is critical. Many Montessorians value staying at home with their infants. Yet we are serving women who have made a different choice.

If a person cannot reconcile the fact that a mother is going to leave her baby for eight hours a day, then she shouldn't become an infant teacher or caregiver working with infants in an all-day program. A professional infant caregiver separates what she did or would do with her own children from what the mothers in the infant program are choosing—without making negative judgements.

Our profession is one that provides excellent quality care and education. Do we believe that what we are doing for children is good? If so, we should not hear comments in the staff room such as, "These children should be with their mother," or, "The children have such a long day."

Schedules

For the Staff

Another thing to consider is staff scheduling. The main concern is that there is an overlap of staff throughout the day. It is important to maximize staffing during the most critical periods of the day. We have fifteen infants in our infant center with five adults who come at different times.

The number of hours a person works depends on each one's capacity. Some people do well with a full day schedule and others do better with a half-day workday. Presently, the school has a variety of full and part-time people. One person comes in at 7:45 AM and works until 5:30 PM; that's a long day. However, the schedule works well for her. She likes it. It's almost a retreat or a break for her. She goes with the flow of the babies all day.

One staff member works from 8 to 4. Another from 8:30 to 4:30. The fifth person works from 10 to 6. Overlapping schedules allow for optimum communication among the staff.

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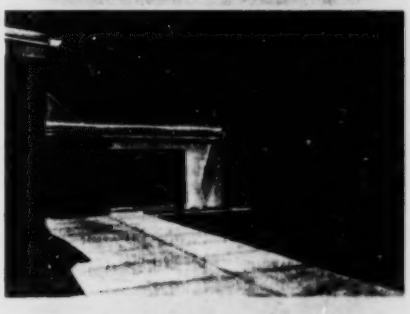
Princeton Center Teacher Education



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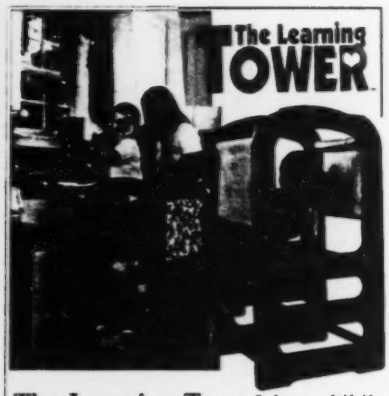

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DEVELOPING AN INFANT ALL-DAY COMMUNITY continued from page 7

For the Infants

I also want to emphasize our schedule for the children. We do not take children into the program for anything less than five hours a day, five days a week. However, parents can sign up for five hours, five days a week; six hours, five days a week; 7 to 10 hours a day, five days a week.

We could not survive financially if we accepted children for fewer hours. This is a very expensive program because our state certification requires a 1:3 adult to child ratio. We recognize that there are situations where mom overlaps with dad so that a baby only needs outside care three or maybe four hours a day. We cannot accommodate such an abbreviated schedule because we have to hire staff according to the state regulations.

When we began our program, we tried to accommodate all parents. Some parents wanted their children to come fewer hours. If they or we could find another baby to make a match for a full-time adult slot, it was okay. But our program quickly became so popular that we became fully enrolled. Some parents sign up before they have the baby. Sometimes they even sign up before they are thinking about having the baby. They know that we can only take a very limited number of children.

When you begin, you certainly can do what you wish, but don't start with fewer hours even to accommodate a sibling of an enrolled child. You need to run a full-time program so you can pay your staff. We do allow parents to pay for a five-hour program and come for fewer hours. Some have selected that option.

You may feel that this policy discriminates against moms who want to stay at home. None-the-less, you do have to define your program and the clients you are going to serve. You cannot serve all mothers and all babies. You cannot meet everyone's needs. I don't look upon our policy as discriminatory.

Financially, we had to define the program to be five days a week, from five hours a day and up, because we wanted to offer a full-day program for infants. We are not a drop-in center. You may want to define your program philosophically. I think that the parents who most need our program, need at least five hours, everyday.

Communication with the Parents

Another important part of our work is parent communication. We record

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Montessori and Resources for Infant Educarers (RIE), Part 1: RIE and The Pickler Institute

By Deborah Greenwald

I was coming down an elevator, thinking hard about Maria Montessori, Magda Gerber, Emmi Pikler, and grown-ups. Also in the elevator, there was a woman with her baby in her arms and I remembered what it is all about. The mom was a little worried about me because I was staring at her baby. I tried to look harmless. The baby was watching the other adults, who were having a conversation. She was watching their mouths. I thought how sophisticated she was for being so tiny. She looked intent.

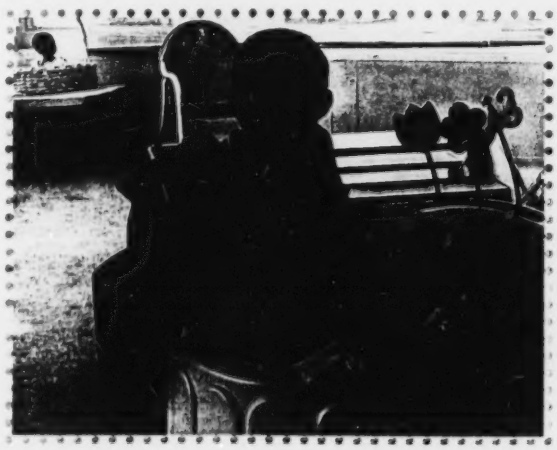
Then she turned and sneezed on her mom, spraying her mom with spit and snot. I thought that's the juxtaposition of babies—an incredible, sophisticated organism combined with drool and spit and snot.

I don't want to get too heavy. It's all about babies. We all love babies and we just really want to do the right thing. The two philosophies that I am going to compare and contrast are the two best ways to care for infants and toddlers that I know of. That is what I really want to share.

I wrote my Master's thesis on this topic. The very last sentence in my thesis is a quote from Lao Tzu, from the Tao Te Ching, "He who is concerned with benefit rather than obedience is at the core of living." This quote is key to all of this to me. The most important thing is that we do what is right for children rather than adhering to a philosophy.

We really need to stay human with our work. That's what I get out of this. We need to be concerned with benefit and not be concerned with, "Oh! This is not Montessori," when it seems to be right with us and the children we care for.

With that said, I want to give you information about Resources for Infant Educarers, which we call RIE. I am writing about RIE to a Montessori audience because I want to share with you what I consider extremely relevant to your work. I will share my studies—my comparison of the two philosophies.



I asked Grazia Honegger after her presentation at the AMS Seminar in New York if she recognizes the similarities in the two philosophies. She absolutely agreed. She said, "We walk the same path. We are very close."

Working with Magda Gerber

First a little background. I started to work with Magda Gerber in 1989 when I was 20 years old. I was lucky. I found my niche. I was really very young. I worked at the demonstration center for the RIE philosophy.

My very first memory is walking into the center, which was located in a little house with a white picket fence and a maple tree. Beautiful, healthy little children were playing outside. I knew that I wanted to work with those babies.

A caregiver was sitting on the path with a little boy sitting on her lap. The two were looking at a little board book. The child was flipping the pages, looking at something, going back and forth. The caregiver was commenting about what he was looking at. My first thought was that she is not making him read the book, front to back. That was my first recognition of the respect inherent in the RIE philosophy.

A second experience that really stands out in my memory occurred after I started working there. I had heated a bottle in a crockpot. I had a primary care group of four infants between the ages of eight and eleven months. We had a room together, the five of us. The bottle was for Ashley. I shook it and made sure it was the right temperature. When I handed it down to her, I heard a gasp behind me. I looked back and there was my employer and soon to be mentor, Ruth Money.

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"We never just hand a baby a bottle. They always have a bottle in our arms." That was when my real learning began. I became absolutely fascinated with the whole philosophy. It was my first understanding of what a philosophy actually is.

Who is Magda Gerber?

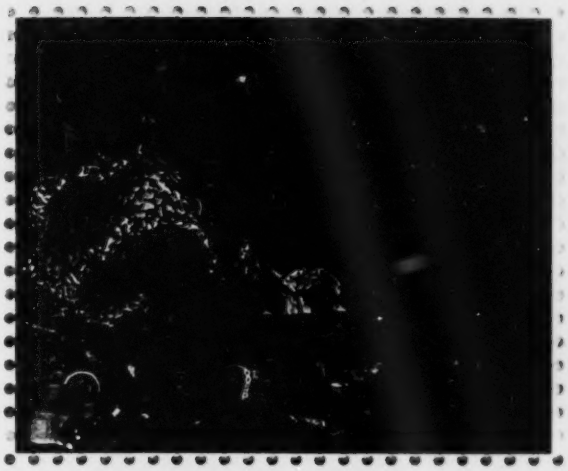
Magda Gerber is a Hungarian Infant Specialist who lives in Los Angeles. She founded RIE in the United States with Dr. Tom Forrest. She teaches parent-infant classes and training for professionals. Between 1996-98, I was the live-in caretaker and parenting class facilitator at RIE on the first floor of Magda's duplex in the Hollywood Hills. The opportunity to teach classes with her was an incredible experience. She is a master, even now in her later years. I really enjoyed watching mommies and daddies grow in confidence and competence with their babies.

Magda was born and raised in Hungary where she, unfortunately, encountered a lot of strife in her lifetime. She eventually escaped with her family in the late 50's and came to the United States.

Her early experiences in Hungary had so impacted her that she felt compelled to share what she had learned with families in the United States. She started RIE in the mid-seventies after several years as a teacher and a therapist for children with special needs. She was particularly involved with children with autism.

Magda Meets Emmi Pickler

Magda and Emmi met through Magda's daughter, Mayo. Mayo went



to school with Dr Pikler's daughter, Anna. One day Mayo was ill with a sore throat. Magda was a young mother and her doctor was out-of-town. Magda didn't know what to do. Mayo said, "Why don't you call Anna's mommy? She's a doctor."

Dr. Pikler made house calls every week to about 100 families. So Magda called and Dr. Pikler came. Magda proceeded to tell her what was wrong with her daughter. Emmi shushed her. She got down to Mayo's eye level and started to speak to her directly, asking her how she felt and what was going on with her. Mayo's response was so grown-up. Magda was amazed at the way her daughter acted when she was spoken to this way. She was only six. That was the initiation of their relationship. Anna is now the director of the Pikler Institute and has been for many years.

Magda was intrigued with Dr. Pikler's work. There is a fascinating history about Dr. Pikler, her background and her trainers. Among these was Dr. Clements Von Pirquet in Vienna. The respect he showed for children during medical exams and procedures was revolutionary. If a child cried, the exam would halt until the child was able to cooperate and feel okay about it.

Who was Dr Emmi Pikler?

Magda's teacher in Hungary, Dr. Emmi Pikler, was a very well known pediatrician in Budapest who worked with families. Dr. Pikler passed away in 1984. Her ideas were very different from the traditional thinking of her day—and very similar to those of Dr. Maria Montessori. They both looked at children, not as empty vessels, but as these amazing people who have many inherent capabilities.

Hospitalism

In 1946, after the war, the Hungarian government wanted to open a home for the orphaned children. They asked Dr. Pikler to run the home. At first, she hesitated because researchers, Renee Spitz and others, were studying orphanages and saw many problems.

There are some very famous black and white videos of babies in orphanages. Perhaps some of you have seen them. Babies are seen rocking, banging their heads and displaying the symptoms that came to be know as hospitalism, a condition often seen in children reared in institutions.

Today, I am a trainer of childcare providers in subsidized childcare centers and homes I had no idea how bad most childcare is. Unfortunately, it is the caregivers that are often blamed for the poor conditions. It is really a systemic problem that we can't go into here. These programs are not supported by the system and we all know that. It is really difficult. I am seeing some of the characteristics of

hospitalism, particularly rocking, in childcare centers.

Many of our attitudes about orphanages and residential institutions for children are very much influenced by that early research. We tend to react, "Ehh!" When I tell people that I studied in an orphanage in Hungary in the summer of 1998, they immediately think of the Romanian babies. I have to say, "No, no. I studied in a model residential nursery."

Dr. Pikler's Insights

Understandably, Dr. Pikler didn't want to be a part of creating damaged beings. She agreed to run the orphanage because she believed that she could do it without damaging their souls, that children can be raised in a group setting without being damaged.

At this point, it is important for me to remind all of us that we too are all raising children in groups. They may be going home at night but we are raising children in groups en mass in this country. That's why I think this information is pertinent.

Through much research, Dr. Pikler came up with the basic principles about the way to raise babies successfully in a group setting.

Building Relationships

One of the symptoms of hospitalism is the inability to form and maintain relationships. This is a key to almost everything that we accomplish in a successful life. Dr. Pikler focused on relationship building and respecting the developmental process.

When you have many babies together, how do you build relationships? She found that the key is to work very closely, very intimately with each child during the care giving routines. Each care giving routine happens with the same person each time.

There are some differences between Dr Pikler's work and Montessori's. I am not trying to say that these two philosophies are the same. Montessorians are so into equipment! You all ask about equipment. This equipment is designed with a lot of thought behind it. What I really want to communicate to you is the quality of interaction between child and adult. That is much more important than the equipment.

Freedom of Movement

The second discovery was the importance of freedom of movement.

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MONTESSORI AND RIE, PART 1 continued from page 12

I was happy to hear Grazia Honegger push for freedom of movement. We do not need to teach movement. Movement is absolutely pre-programmed in the infant. We, as Montessorians, know that. The 3 to 6 training focuses on an amazing analysis of movement. There are some infant and toddler training courses that focus on movement and there are some that do not.

Dr. Montessori didn't really give us specific directions for infant toddler care. She gave us theory. Her pedagogy is a blank page. I believe that Dr. Pikler wrote on that blank page but unfortunately for most of us, she wrote in Hungarian so most of us can't read it. Many of her books are published in Russian, German and French as well.

The Pikler Institute

The full name of the orphanage is the Emmi Pikler National Methodological Institute for Residential Nurseries. They hold training courses for other residential nurseries around Europe. They have been conducting research for a solid 50 years. Unfortunately for us, all the research is written in Hungarian and Russian.

In the fifty years since Dr. Pikler opened the institute, they have never closed their doors. They have studied the infants in this environment in a very naturalistic way. They study the children minutely but they have not set up experiments in a laboratory-like sense to see what the babies do. It is all about how to make it as good as possible for the children.

My Visit to the Pikler Institute

When I did get to visit The Pikler Institute in July of 1998, I had to work hard to get in. They are so protective of their babies. The doors are not open to everyone. You have to be accepted—and pay. It is not like going to observe in a childcare center. The babies live there and all of them are there because they have experienced some kind of serious trauma. The most important directive for the caregivers is to maintain predictability and consistency in these children's lives so they can heal from the trauma they have experienced.

Deborah Greenwald's professional experience has been directly related to infant and toddler care and parent/infant education.

She is currently the Infant Toddler Specialist for Children's Services Center, Pensacola, FL, responsible for training and assisting child care providers in centers and homes, developing training programs, collaborating with local agencies, and consulting in the development of a model infant toddler care center.

Before joining the Children's Services Center she served as the Parent-Infant Guidance Class Facilitator and live-in caretaker at the RIE Institute in Los Angles where she first became acquainted with Magda Gerber and the RIE philosophy.

Deborah has a strong Montessori background. She has been a faculty member, Montessori Teacher Education Center of the San Francisco Bay area since 1998, a lead teacher in the Infant Toddler Parent Program at Pacific Oaks Children's School (1996-98) as well as a lead teacher for the Toddler Class and Parent Education Coordinator at the Montessori Early School, Pensacola, FL (1994-96)

Deborah has both an AMS Infant Toddler Certificate and an RIE diploma. She completed her MA in Human Development in 1999 from Pacific Oaks College, Pasadena, CA, specializing in Leadership and Human Services. She has a BA in Liberal Studies with a minor in Women's Studies in 1993 from Humboldt College, Arcata, CA.

The Bath

The video, *Attention to Each Other: Infant and Adult During the Bath*, an example of a bath given at the Institute, shows us that the process is intimate, slow paced, and extremely predictable for the child. The body is washed in the same way each time. The caregiver's ability to respond to the child's cues and the child's cooperative action and engaged interest are phenomenal to the practiced eye. The infant in the film is 10 months old.

I hear many gasps in the audience at an exquisite moment when the caregiver is holding a sleeve for the child's arm and the child holds the other arm out. The caregiver quickly

moves to the other sleeve to meet the child's attempt at cooperation. The sensitivity is incredible.

Changing tables are also used for the bath. They are large and square. They are designed to enhance freedom of movement and cooperative interaction. Children are laid down on their backs facing the adult, as mothers do, rather than sideways as we do in most childcare programs. This way the eye contact is natural.

The Playpens

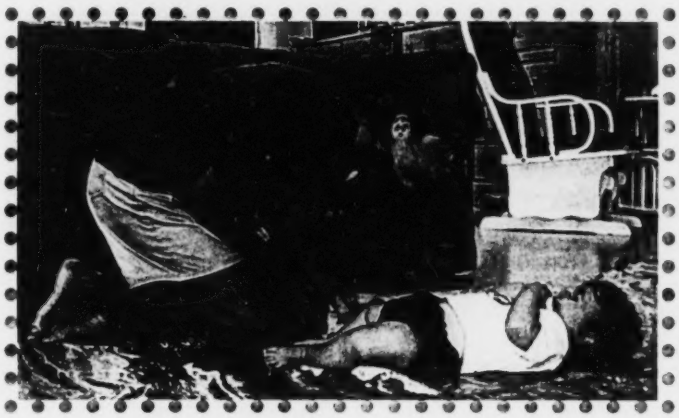
At the Pickler Institute the playpens are as big as rooms. An area of chairs defines the playpen and beyond that area, there is a pathway. The caregivers are called nurses. They walk back and forth in the pathway. There are cribs and there are all kinds of things going on. The floor in the playpen area is covered with sheets. Nobody with shoes would ever walk on the sheets. They are clean. There are no hazards to be found.

This is a designated play area but the difference is that there are no walls. The children are not separated visually or aurally from whatever is going on elsewhere. The Montessori ideal of no physical boundaries for infants and toddlers is very hard to live with, for both the children and adults. The children are outside almost all of the time anyway. The play yards are wonderful.

Rocking

There was one particular Romanian baby rocking at the Pikler Institute. Somehow he had been rescued. When we asked about the boy, we were told that he is rocking less and less. They do watch symptoms like rocking and are concerned but they are also attuned to the situation. My colleague, Ruth Anne Hammond, responded that she wanted to stop him from rocking and asked what they do for the child.

The answer was no, they do not stop him from rocking. They



recognize that this is the child's coping mechanism. That is a skill that he developed to deal with the lack of stimulation and the lack of interaction that he experienced early on. That's him going inward. It is almost like autism in a way.

She explained that they wait until he is not rocking. "Then we draw him in with us. Each time we engage him, we show him how wonderful the world can be and how nice interactions can be."

That was profound to me. That is the quality of respect. Even though we know that it is not good for him to spend his life rocking, they respect that he has come up with a way to handle his situation. They reach out to him when he wants interaction rather than when he has turned inward.

Head Banging

Head banging is another common symptom of hospitalism. How do I handle head banging in infants and toddlers? I put my hand on whatever the child is banging against or on the child's head. As a consultant in my present position, I just made a referral to an early interventionist for an eighteen-month-old boy who is doing this. When I saw this child, he didn't know me. I didn't have a relationship with him so I couldn't work with him.

He gets down on his hands and knees, positions himself and starts rocking. He was banging his head on the entrance door of the classroom. I didn't sit next to him with a "you have to stop now" attitude. I just sat next to him—that's all I did and he just stopped. He looked up at me and smiled. Then he crawled into my lap.

If he had continued banging himself, I would have put my hand between his head and the door. I would have encouraged him to be gentle with himself.

Longitudinal Studies

At the Pikler Institute, there are many longitudinal studies. These ladies are very thorough. The studies are written in Hungarian and Russian. They are very proud that their children come out of this experience as well adjusted adults, able to hold jobs, marry and have children of their own even though they never had parents of their own.

Dressing and Self-Care

The respect for the child practiced at the Pikler Institute is so amazing! Each child has his or her own clothes to wear when they leave the Institute. Personal grooming is

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very important. They all wear the same kind of little underpants. I was there in the summer when it is really hot. They have little pads that go between the legs. The children can put the pads in and pull them out when they are wet.

They all wear the underpants, but they each have their own outfit. When they step out of the gate, they wear their own clothes. There is not a communal pile of clothes. An individual sense of identity is preserved and encouraged, even treasured and celebrated. They each have their own birthday parties as well.

The Pikler children remind me of Montessori children. I watched the nurses get the two-year-olds ready to go for a walk outside. The children look in the mirror. They check their shoes and they comb their hair.

One day, while we were having the afternoon discussion of our observation, Anna, the director, came in smiling. She had just been downstairs watching tiny, two-year-old Claudia get ready for her walk. Claudia had looked into the mirror while she was getting ready to go out and said, "Look at me!" The director knew that Claudia felt good about herself. That is a significant sign of success to the staff at The Institute.

The Age Range

Once the Pikler Institute had children from birth to two only. Now, because of political circumstances, they have older children up to six years of age. They work very gently and kindly to introduce the children into public society. First, as toddlers they take walks, with the same caregiver each day. The children choose the direction to travel!

They have a little schoolhouse in the institute to prepare them for school. There is a staff pedagogue who prepares the environment. It is not Montessori specifically but there are elements that you would recognize. I took a lot of pictures. Eventually, the children go outside to school.

Adoption

Are the children ever adopted? Yes, but the process is full of red tape and difficult. There were some Romanian children at the Institute who could not be adopted.

The children's chances for adoption are not good. The caregivers give everything they can early on. There is a concerted focus on independence because that is what the children are going to need. The Hungarian government is turning more and more toward foster care. One of the terms they use at the Pikler Institute is, "His future is absolutely uncertain."

There were forty babies at the Institute. There was one successful adoption in process. The transition is very slow and respectful from what the child knows at the institute to her new home.

Caregiver Schedules

The Institute operates on a twenty-four hour day schedule. Each caregiver has an eight-hour shift. It is just not possible for a baby to have the same caregiver all of the time. The idea is that each child has a primary, secondary and tertiary person in their lives. That's how the schedule is set up. The bath, which they consider to be one of the pleasures of life, happens everyday with the same primary caregiver.

When I worked at the RIE demonstration program in Southern California, we had two caregivers. I worked seven to eleven-thirty. Another person came in at eleven and stayed until six. We worked with the same group of four. They knew us and we knew them. It really worked well.

At the Pickler Institute, the children have the same cycle of caregivers. The caregivers meet in between and discuss minutely what happened during each cycle. They know everything that happened in the last eight hours. The level of discipline of the caregivers is probably something that we cannot achieve as Americans. It is so different. That is what Magda always says.

Part 2, A Comparative Analysis of Montessori and RIE will follow in the next issue.

Letters to the Editor

I am enjoying the *Infants and Toddlers* publications so much. I will be joining Ginny Varga this summer to co-teach with her in the CMTE/NY Infant and Toddler Teacher Education Program. What a gift you, and all who contribute, have given the parent and teacher community with the articles, information and encouragement through the journal. I love sharing it with our parents of infants. I will be encouraging the parent community to subscribe.

Kathleen M Duval
Maple Knoll Child Center
Cincinnati

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DEVELOPING AN INFANT ALL-DAY COMMUNITY continued from page 8

for the parents a daily rhythm sheet that covers the basics of what happens each day. The teachers record information like what food the child eats, when the child's diaper is changed, what is in the diaper and when the child naps. My point here is to say this communication is important. You do not have to follow this sheet exactly.

As Montessorians, we want to communicate many other things about the children—their language, movement, development and abilities. Tell the parents what they want to know, what their child ate, how much he or she slept. Then parents frequently will also hear the rest. But the basic information should come first.

From the Parents

The daily information sheet from the parents is another form of communication that we use. The parents bring it to us every morning. That way the staff knows the details of a child's diet, their diapering, how they slept or anything else they can tell us.

It is important that parents write it down—not just speak it. Certainly, the information is also spoken, but when it is also written down, the staff can refer to this sheet during the day. If something happens with the infant, the caregiver has a point of reference and can see that the problem may simply be that, for example, the baby didn't have a good night's sleep. The babies don't talk to us so we need to have this information sheet.

With Infant Journals

We also have infant journals for parent communication for every baby. In it, we record information and place the photos we have taken. We use a spiral notebook. Very simple! When the child leaves the program, parents have a journal.

The teacher writes down things such as when they say their first word or when they made friends with another child. Whatever it is, it's a treasure. And often, there are pictures accompanying the entries.

We record in each child's journal at least one or two times a week, not necessarily daily. The idea is not just to put something in the journal. The entries should be highlights. If they see something, the teachers have a camera close at hand. They just click and save the picture for the parent.

With Infants

The ability to speak to infants without requiring a response is essential. This is an interesting phenomenon. To assist the infant's verbal development, the teacher is always talking to babies. There is the whole sequence of communication with babies about diapering, for example. Babies, however, are not yet interactive and do not respond verbally. Adults who require verbal responses are better suited to teach older children.

Within the Staff

Communication between staff is just as important. Obviously, the journal and the other information sheets provide important communication. Even if your program is not as sophisticated, you could keep a little white board on the top shelf. You can communicate information to the staff like "Everyone needs to be up at 1:30." Communication between staff is critical in any class, but it is particularly critical in full-day programs.

Space

Another consideration for a beginning infant program is space. Do we have the space required? Often strict licensing codes prevent us from implementation. Space is needed for the little ones as well as

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the adults. Spaces usually are divided into the infants' eating area, sleeping area, activity area and a parent reception area.

Sometimes, schools have one large room that is divided into the above areas. In other schools, there may be adjoining rooms or entryways. Safe, clean space is very important. Division and arrangement of space has been a creative process at Princeton Montessori School.

Materials for the Infant Program

Materials are necessary. Most heads of schools and early childhood teachers approach infant materials from their experience with early childhood and elementary programs where there are many didactic materials to buy. The first thing we do when we start those programs is to contact a Montessori supplier to find out how much everything costs. And then there are all the resources for teacher-made materials to be added.

We are programmed to think of materials as the key to having what we need to implement a program. There are materials for infants, but they are not a major cost factor.

Courses delineating materials for infants are held during teacher training. However, generally speaking, you need objects that are safe for infants. You will want to consider their variety, color, texture and, of course, developmental appropriateness.

You need mirrors, mirrors, and mirrors! Why? Infants who are just becoming aware need mirrors even more. It's good to have mirrors all over, everywhere.

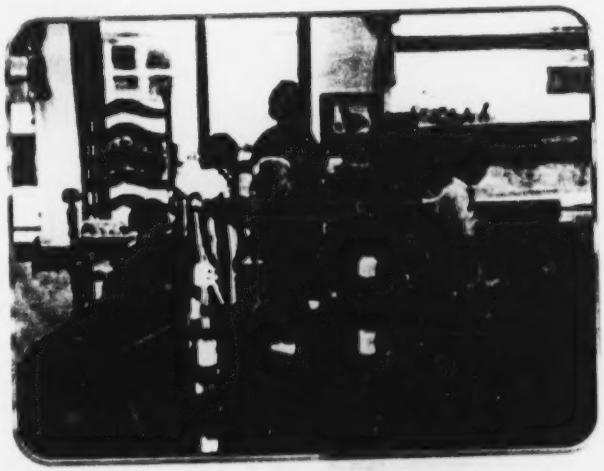
Mobiles are important, as are spaces with rugs and smooth spaces. Obviously babies touch everything so you want variety.

You need some push toys. When babies are just starting to walk, they can't walk by just standing up and walking. They need something to hang onto. When they push something, they forget that they are walking and just do it. When my son first learned to skate, he wobbled all over. His coach gave him a chair to push around the rink. By the third time around the rink, he started to skate by himself. Babies need chairs that are lightweight that they can push all over to help them learn to walk.

We also have a climber in our large gross motor area in the infant-toddler room and we also have a climber within the activity area. We don't use highchairs or cribs. These are used to accommodate the adult. What other kinds of furniture do you need? You need low tables for eating. We have a diapering area and a sleeping area with little, low beds. Basically, that is about it for furniture.

Planning for Movement

We don't put children in cages, in boxes, in playpens or in cribs to contain them. In our culture today, we can put a baby in some kind of container from morning until night, thinking that we have done the best for the child. The first thing most parents do when they have a baby is buy furniture to put their child in. First, remember—the most important developmental activity for a child after birth is moving!



If you were sitting in an infant seat right now with your hands constrained and the plastic sides close against you, how would you feel? You would feel the way you do when you are in an airplane. That's how the babies feel when you put them into a

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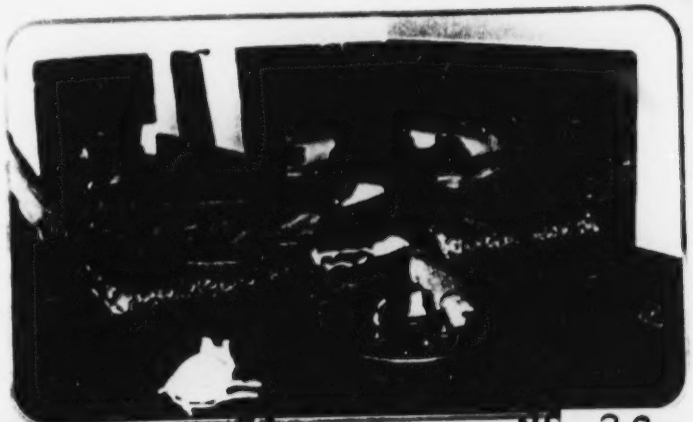

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car seat. Then the car seat turns into an infant seat. You pick it up and carry it inside. In the grocery store, you put the infant seat into the cart. Then, you turn the infant seat into a seat to feed them. You put the seat on top of a table.

You can put the baby into so many things. You can put them into a highchair when they are sitting up. You can put them into a playpen. Now they have playpens for the beach—or for whatever you want. People with babies travel everywhere. They need a van to put all the baby stuff in. Come on! All you need is a blanket on the floor to provide a place for the baby to move his or her little hands and legs around.

We do have infant seats to use during certain times. We don't have a lot of swings. I am not saying that you never need these or that any of these things are bad. What I am saying, however, is that in an infant center, these things can easily be misused. If you know that movement is the most important activity for babies to develop at this young age, you will not put them in things that restrict movement. Our role is to educate parents about the importance of movement.

Adult-size Furniture

I also want to emphasize that we do have adult-size furniture. We have a comfortable rocking chair for adults to feed the babies in the nap room, to rock the babies or whatever. There also needs to be furniture suited to adults such as a comfortable rocking chair, adult-size countertops, sinks and tables. Keeping in mind the needs of both the infants and the adults is the general rule of thumb

Conclusion

Although there is much more to discuss in setting up an infant all-day program, the issues of staff, schedules, communications, space and materials are the main factors to consider as you begin. As in any program that Montessorians begin, creativity is required to make it work in each setting. Hopefully, we can look forward to many more schools with infant programs in this new millenium. Wouldn't it be great if by 2010 over fifty percent of all our schools had full-day infant programs? Let's work together to bring about this change.

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is for and how it is used. It also may be helpful to motivate them to be like big people.

Readiness is indicated by a child's awareness that he or she is urinating or having a bowel movement. Other clues might be that the child indicates that they want their diaper changed.

They may actually tell you that they are urinating. If the child has the words for what they are experiencing, it helps them know what is happening.

Never ask children if they want to use the toilet. Instead say, "After you use the toilet, we will go outside," or whatever the plan is.

If a child wets, one can just say, "Ooops. Go get some dry clothes while I clean the floor." (Young Children, 2000)

The rest of the readiness question depends on the adult's readiness to put forth the necessary energy and commitment to support the child in the process. This means the parent must decide to stay home for the weekend and dress the child in as few clothes as possible so the child can manage to use the toilet as quickly as possible.

Just as it takes a genuine commitment of time on the adult's part to support the child's learning in so many other areas, it takes a commitment of time to help the child learn to use the toilet. The process can take a few days or a few months. It depends on the experience of each individual child. It is most important that the experience is pleasant and joyful. A child should not be threatened, shamed or punished for wetting him -or herself.

Reference: Young Children, July 2000, page 83.

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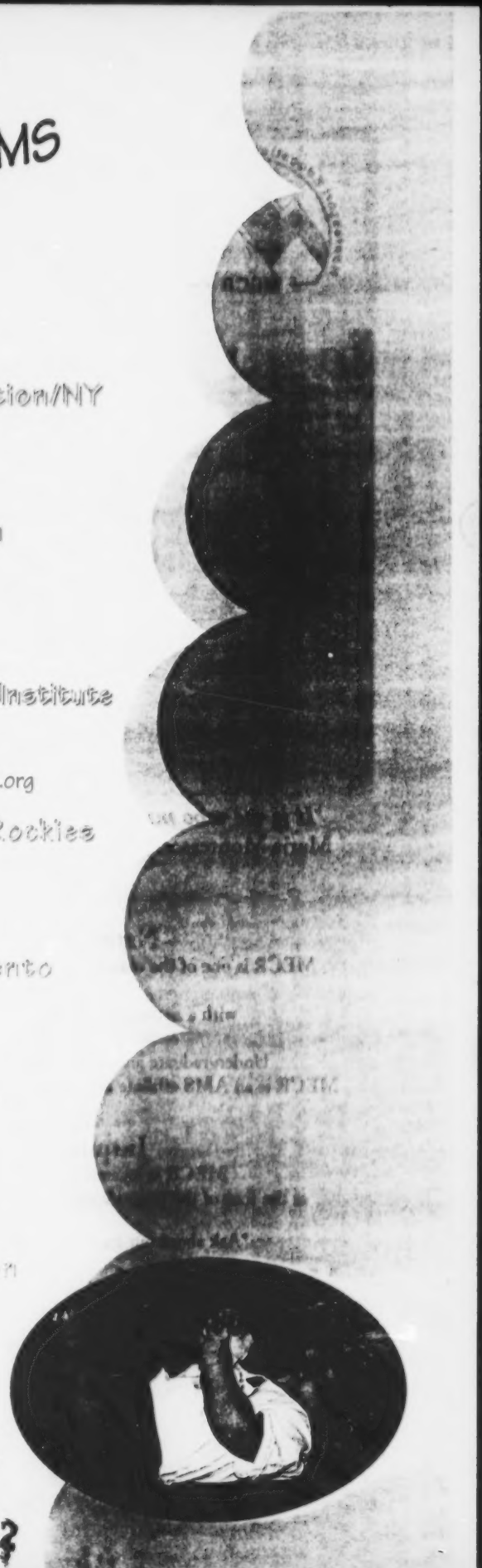

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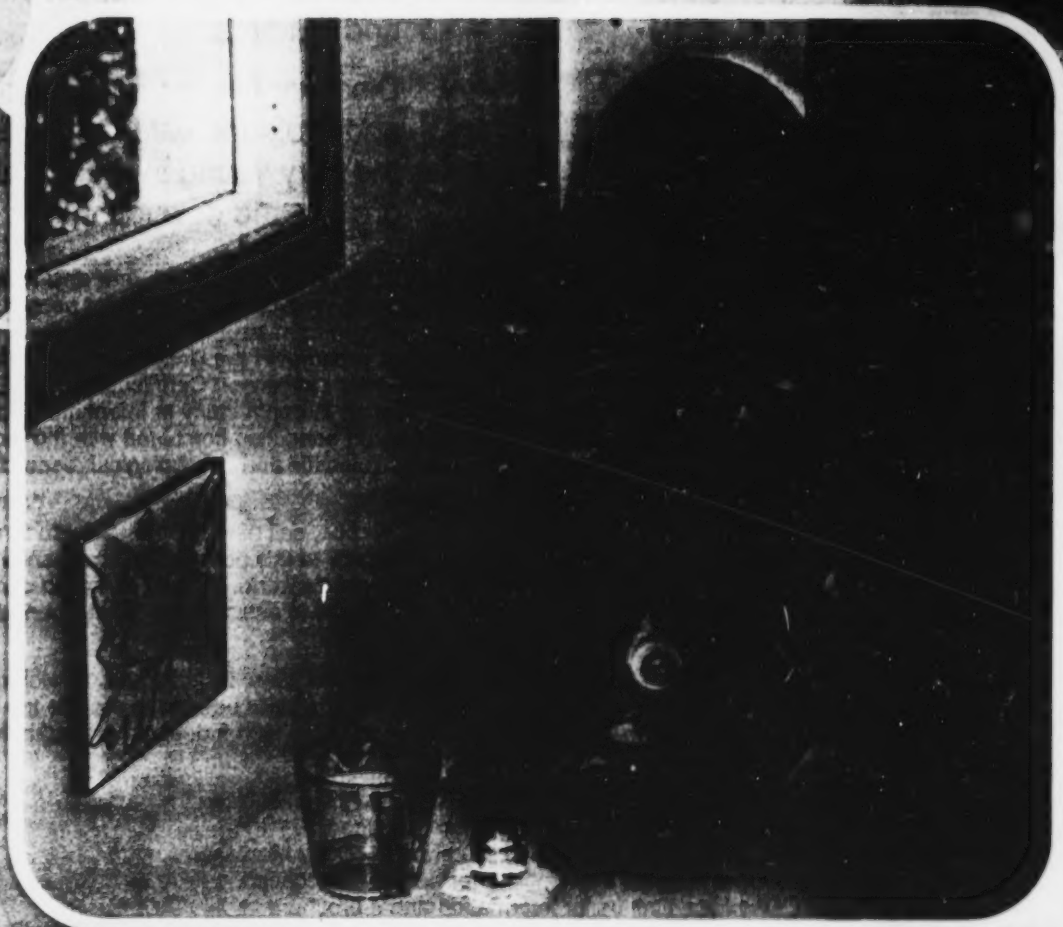

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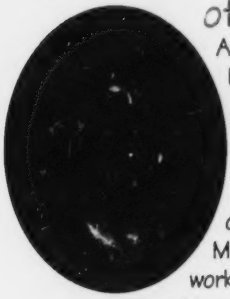
Editorial

The Experience of Peace



At almost every Montessori conference I have attended there is either a presentation or a discussion that centers around peace. Most of us who have worked with young children in a Montessori environment have experienced a peace and harmony that becomes a part of us, an experience that is hard to explain to others outside Montessori. It grows and becomes an integral part of daily life.

The Montessori environment supports a calmness and cooperation that helps the adult build a personal sense of peace, perhaps for the first time in one's life. We learn to model peace for the children, other adults and the community. As we do so, we are ultimately able to see that it is the true nature of the child who models peace for us.

It is exciting for me to read Patricia Picchetti's article, To Be Near the Child. Patricia's work with parents of young children over the past twenty years has helped many other Montessorians expand their Montessori commitment to the unborn, to infants and further to their parents. We interact with children for only a few years of their life. We know that the parents will influence their children for a lifetime. When we can work with both the child and the parents, we work for a lifetime of positive change. As Patricia states simply in her article, "Here we have peace and harmony."

I have often told others that understanding Montessori is similar to understanding another language or culture. It requires a different way to think, a different way to act, a different way to look at the world. When we help the parents learn to see differently, we also extend to them the possibility to live together in peace.

Lillian DeVault Kroenke

Letters to the Editor

****

Thank you for including the article by Deborah Greenwald about her work in RIE and the Pikler Institute in the Summer issue of *Infants and Toddlers*. I was inspired by her presentation at the AMS annual seminar in New York City in March. I felt she brought an important perspective to our focus.

She made me more conscious of remembering the importance of the relationship in working with very young children. I now strive to bring that perspective to the awareness of the parents I work with.

Thank you for your labors that result in this lovely publication coming to my mailbox four times a year. I do appreciate this resource.

Marti Bondelid,
Oreland, PA

****

Ask Ginny...

by Ginny Varga

Q Do infants bite? What do you do about biting?

A Biting can start at most any age. Generally, toddler teachers ask about biting. I thought it was only a toddler problem until I started working with infants. I found that they also bite. In this case, it is good that the child who is biting is not walking yet because the diaper saves many children.

First of all, I say that we have to prevent biting. This means that the caregivers are observant. For children who are likely to bite, it should be easy to pick up for the most part what initiates the biting. For example, a child may bite when he or she doesn't get what they want or if someone takes something away.

At some point, you can give the child the information not to bite. Does anything verbal work? I haven't found anything yet that really works. That's the reality. You try different things with different children.

For the most part, I always say, "Be careful what you give attention to, because attention is the greatest reinforcer. So sometimes with attention, for the child who is always biting, you may actually encourage the child to bite. Sometimes, the child bites and laughs or smiles. It's not a moral issue with infants. They just want to get attention.

That is why prevention is best. For example, when one child is getting very close to another one who bites, a prevention technique I use is to lie on the floor almost between them to block them. I will play with one or do something with the one who looks like he is ready to bite just so he doesn't. Distraction is probably the number one thing to do. You will have a child who bites a lot and you can't prevent it every time. They chew too. I had one child come up and chew on my leg. He always laughed and smiled no matter what we did.

I read something that made sense. Sometimes biting or chewing can come out of the way that adults play with a baby, playfully kissing and nibbling and biting. It is very common for mothers to play with their children this way. It's a fun thing to do. The children carry that on. It is not always aggression. The mother of the little fellow who was chewing on us was upset. I asked her if she played with him like that and she said, "Yes, that's what I've done."

So we do have to be careful how we play with children. And we have to find a way to help break the pattern without giving the child undo attention.

For future issues, please direct your questions to:

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To Be Near the Child:

Introducing Parents to Montessori

By Patricia Picchetti, M.D.

Patricia M. Picchetti, M.D. is a physician trained in Pediatrics with a special interest in Child Development and Education. She is a Montessori Certified Educator from pre-birth to six years.

This year Pat opened her own school, Children's Montessori Language Academy, in Westmont, IL. where she is teaching the Parent/Infant/Toddler Program. In addition, her school offers a 3-to-6 program with an extended day immersion in Spanish.

Pat is a national presenter, consultant and an accreditation mentor for the American Montessori Society. She is a published journal author and an environmental designer of Montessori classrooms. Pat is also a visiting Professor in the field of Early Childhood education. She lives in the West Suburbs of Chicago with her husband, Jim, and their four children.

Think about parents today. Think about the technology available today and about where it will go in the future. Use your imagination. There are no limits to where technology can go.

I watch all four of my children and it's amazing what has happened so far, just in the lifetime of my teens. When my oldest child was born, there was no Internet. Now my children in high school go onto the Internet for school-related projects almost every single day.

We are really in an age of technological advancement! There have been incredible technological advancements in terms of childcare, educating children and products for children. So much that has happened occurred very quickly. Parents can now be very well informed about babies and especially the birth of a baby.

Today's Choices To Have a Baby

There are various options to consider when deciding to have a baby. A couple, today, has the option to decide how to have a baby. Think about that for a minute. Yes, there is the old fashioned way. But not all couples can do that for a variety of reasons, many of which are medical.

Some of those options involve ethical considerations that we really have to think about, such as multiple implantation and its consequences. Some parents opt for adoption rather than actual birthing. Some parents decide to be foster parents or to work as mentors or as Big Brothers or Big Sisters in the community, maybe for special needs children. That's how they have a child.

There are a variety of family options —married couples, unmarried couples, single men and single women. A couple can decide when to have a family. They can actually think about their careers. I have many families that plan it out— when do we want to have a child, how old do we want to be? How do we time our children? The mother can have a child at home, in a birthing center, in a labor and delivery suite or even in an operating suite. There are various options open today.

Parents can even decide how many children they would like to have to complete their family. They can say at one, "I'm done." They can say at two, "I'm through." Or "I don't want any—any at all." They can say, "I want a large family."

Some of these issues are decided by accident. Couples can have babies the old fashion way—all of a sudden a baby is conceived. A young teen mom or a mom who is older like myself can have a baby.

Information for Parents Before Conception

Parents become educated on all kinds of issues as they get ready to have a baby. There is prenatal care, for example. Parents are offered appropriate nutrition information for the mother and the baby. They are educated about healthy lifestyles for either parent even before they have a family. Don't take drugs. Don't smoke. Watch your alcohol consumption. Watch your medications. There may be some you'll have to stop.

Are you working in an occupation that could affect your sperm count? Maybe the mother is not able to hold that child and she'll miscarry. With information before conception, the parents may be able to change some of these options.

For Children

Parents are educated about the development of the child from month-by-month. Each parent involved in a community birthing program gets that information.

Even children in school now get that information. One of my children just got through learning about the development of the child month-by-month. I try to understand what he knows and what he doesn't

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understand. For example, his question to me was, "When the baby is finally born, they cut the umbilical cord. Doesn't that hurt?" I had to think, "No, but how do I explain it?"

Consumer Products

Consumer advocates consult with the parents about appropriate baby care products and clothing designs for both the mother and baby. Parents hear about hypoallergenic products and materials and, of course, timesaving furniture.

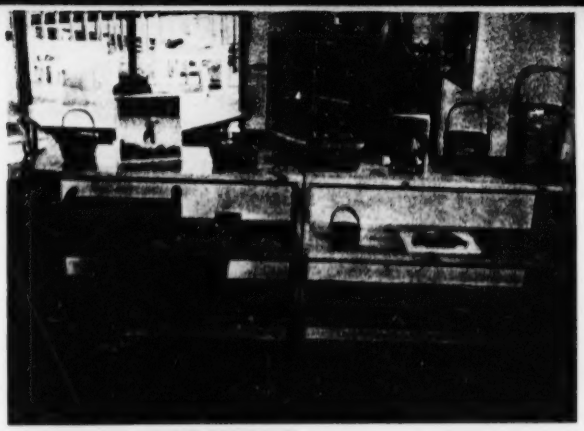
They have a nursing crib now that is tall and you can take down one side and push it up against your bed. Then when mom is sleeping at night, she can just kind of roll over, take the baby out of the crib, nurse and then put the baby back into the crib. Me? I just put the baby in my bed and nursed.

Now there are even convertible nursing cribs. When your baby stops nursing or gets too big for this little crib, you can turn it into a portacrib. You can turn it into a toddler daybed. Then when you really can't use it anymore, you can take the mattress out and it becomes a bookcase. Parents are bombarded with all kinds of things from many different advocates.

A mother-to-be has choices about pregnancy and post pregnancy care. She has choices about her attire. She has breast feeding options, caregiver choices, and the role of the father.

Sibling Education

On top of that, now there is sibling education. Siblings are most commonly offered babysitting classes. Sometimes they can attend adjustment seminars—how



to adjust to the new baby who's coming. There are usually room arrangement changes because a new person is coming into the home. Either the sibling must go some place else or the new baby invades the sibling's room. And, of course, siblings face giving up certain possessions—including their parents undivided love and attention.

But What About the Baby?

What about the child to be born? What thoughts have been given to the needs and wants of that child—the child who is coming? Who has considered the potential within this child? What will be necessary to aid this developing potential? Parents are usually not given that information. Who will be the guides for this child?

Montessori observed the child. Montessori spoke of the inner potential. Research has largely validated and proved her work and her observations. The parents will be the guides to this child. We, as Montessorians, will be guides to parents and children alike. Together, we are going to figure out what is necessary for the child who is coming.

The Role of the Mother

Montessori education begins before birth—not when the child is born, not when the child is two or three or seven—but before birth. It begins with the mother being aware that she carries a human potential within her, a human being. It begins by recognizing that this child is a separate, unique individual developing within her own body.

This new individual has needs—the need to grow, the need for food and communication. Think about that. The unborn child has the need to communicate with the mother and the outside world. We know now, without any question at all, that the child in the womb learns. Before birth, the child is already learning.

The mother is the house for the child. She provides the child's first environment. But the child is already becoming his or her own person, very distinct from the mom.

The Role of the Father

The father needs to be aware that he is a loving support person. He is a co-teacher with the mother and a co-learner discovering who this new child is going to be. He too must recognize that education begins before birth. He needs to educate himself as a father. What does it mean to be a father? He must educate himself as a teacher and how to be a co-teacher. He needs to be educated about how to be a loving partner to the mother. He too is the inner guide for this child. And, he is also the protector of the child and the child's potential.

The Role of Montessorians

We, as Montessorians, need to offer the parents an effective environment to learn about the developing child and to learn the expectations of what it is to be a parent. How many individuals

understand what it is to be a parent before the child comes? I didn't. I didn't know what to expect until the child arrived. We survived the first one, but we made some mistakes. Then the second child came and we were a little bit better. We didn't make the same mistakes. Instead, we made new ones.

How many parents come to you and say, "I didn't know that a child takes so much time. I didn't know that this child costs so much! You mean that I have to give up my job?" I hear that a lot. "Well, I went to school all these years. What about my career?" Or the mother asks, "Who's going to help me? I thought my husband was going to help." He says, "I'm working. I am helping." Or vice versa. The roles could be reversed.

Parents need help understanding what are the expectations of a parent? That's what we have to do. We need to gently, very gently, introduce Montessori and her method to a community of adults who are searching for the right approach to parenting. Parents who read all kinds of conflicting information are looking for the right way. They come to you and ask, "What is right for my child? How can I do this right?" We have the means to offer them.

Our Objective—Seeing the Child As an Individual

We need to help the parents make a life long commitment to the child—a commitment which allows the parent to look at who their child actually is. Instead, many parents think, "What can I make of this child?" How many parents say, "I didn't have the opportunity to do this or that, but my child will." Or, "We didn't have enough money when I was growing up, but my child will have everything that he or she wants." Or, "I never got the chance to be a musician, instead I'm a (something else), but my child will play for the symphony." Parents need to be shown that they need to look at who this child individual is. This child has a potential already.

And we also must see the value of each child as a person and not as a commodity. Some of my parents come to my environment and talk sometimes about their children as commodities. The children are not commodities. They are persons.

The Unconscious Absorbent Mind

From birth to age three, the child is in the state of the unconscious absorbent mind. The child takes into the mind a wealth of information. They also take it into their bodies. The unconscious mind means taking everything into the mind—and into the body. At no other stage of development will the child grow as rapidly as during this time.

Innocence in Learning

This period is an age of innocence for learning—innocence. These children do not make judgements about what they are going to learn. They are going to learn about this today and that tomorrow. They just take in everything. That's what the absorbent mind is—no judgements, no critiques. Everything available is learned by the child at this age. All is received for use now and in the future. Nothing is wasted, either intellectually or physically. Something they learn in this second can be used immediately in the next second—or maybe in a day from now.

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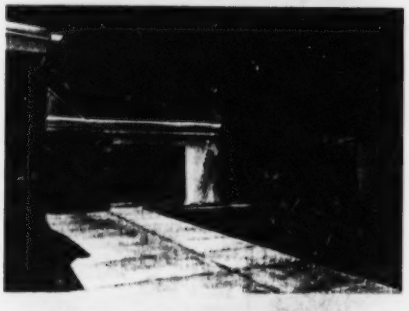

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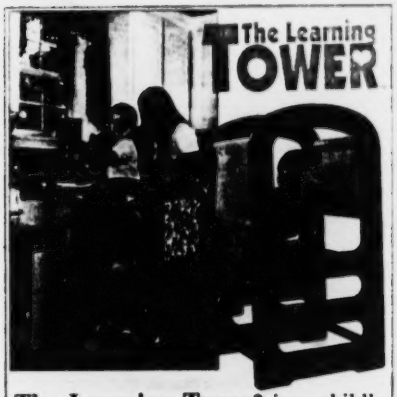

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The Harmony of Mind and Body

It is true that knowledge is accumulative and that the mind expands. Experiences are logged from the body as well and the body thrives. Mind and body are in a state of harmony—always growing. Parents need to understand this. We have this absorbent mind that searches for the unity of the body and the mind. Yes, there are struggles. There is not harmony all the time. There are conflicts. And from those struggles come growth.

The child learns something and the mind just surges forward. The child is on a cognitive trip, literally. And where is the body? The body lags behind. Then, all of a sudden you see a growth spurt and the body catches up. The children get taller. They fill out in dimension. They get stronger. The fifteen-month-olds move all the furniture in my environment. And they have tremendous endurance. Think of the four-year-olds that play tug-of-war with a piece of rope. Endurance!

This young body increases and expands. The mind seeks to understand what is it that the body is doing and tries to help. This is a time of great strides. It is a time of bipedal movement from zero to three—moving up onto two feet. It is the time of acquiring the language of parents and much, much more.

During this precious time from birth to three, we need to offer the families a growing environment. It must be a dynamic place that nurtures both the parent and the child. As Montessorians, we must understand the changes that are taking place in the developing child. We must observe the absorbent mind and witness all this power—and it is extremely powerful for the child. We must seek the means to serve the child. That's who we are. We serve the child. We must encourage parents to seek the harmony that comes when the mind and the body work as one. This takes patience.

Presenting Montessori As a Way of Life

During this time, Montessori and her method can be presented to the families and to the children. Present Montessori in the home within the family. It is our role to show parents how much Montessori can become a part of their everyday life. And ultimately, how Montessori will become a way of life.

For me, that is what happened in my life. I found Montessori and immediately I thought, "If I know this stuff, I can be a better parent." As I got to know it more, I started to live it. This isn't a cult or a religion or anything like that. This is a way of looking at the child, a way of respecting a child, a way of listening. This is a way of always thinking, "What does the child mean? What is my child trying to say to me?" instead of getting angry or impatient. Think, "What is really going on here? Maybe the child is angry and impatient. I have to figure out why."

Believing and Living the Method

Montessori taught me how to be patient, to be gentle, to approach my children with a new outlook. And this is what we want to happen to our parents. In order for that to happen, you must believe in the

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method yourself. If you don't believe in it, if you just think it is a set of materials, you won't reach the families.

You must believe in the method and you must live the method. Parents are going to look to you. How do you carry yourself? How do you speak to the child? Are you respectful? Do you walk slowly with the child or are you just pulling the child along?

You must live the method. Montessori must become a part of your life. Then it becomes second nature to you. Then we can truly be models to parents. In turn, these parents will become models for their children.

How Do We Help—Program Options

1. The Pre-Birth Program

Now, how do we, as Montessorians, answer the call of the child? How do we help the parents to be near to the child? How do we educate children and parents in a respect for life and thus to develop a sense of peace in the family? It begins with a place and it begins before birth.

For parents who are expecting a child, we must provide a safe and comfortable place where parents can trust the information they receive. Here they will come to know the child before birth and to be educated about the child's needs.

This place can be in your school. It can be in the community or it can be part of an already pre-existing program. For example, I teach a parent/infant/toddler program for parents of children from about six weeks of age to three.

When a new expectant mom comes into the school or when I hear about a new mom coming into the school, I have her come to the parent/infant program while she is still expecting. I let her observe the class. I let her talk to the other parents. I invite dad as well, but many times it's the mom who comes initially.

We talk about the development of the child. We talk about how the child is learning in the womb, how the child communicates with the parent and how to communicate with the child. We talk about gentle births and how to prepare the child's room for the child's homecoming. All that happens within the scope of my program.

The parents can come every week. The mom or dad can also come once a month to visit, in accordance with mom's pregnancy. Some parents may only come once, twice or three times altogether. Moms who already have a child in my program or who may have been with me for a while are already in step with the program.

If I have an infant or young child already in my program, we talk about both children—the one to be born and the one or more already in the environment.

Building Communication With the Mom

If she comes every week, I ask about the child who is coming and what's new. I also ask, "How do you feel? How is the unborn baby doing? Is the baby moving? How is the baby moving? How do you know? How did you feel the baby? Oh, you know where the head is. How do you know? What do you feel? Oh, your baby likes music? What kind of music does your unborn baby like? Have you given the baby a name?" If so, I begin to call the baby by the name.

I heard a Sister in Milwaukee who has a degree in music. When couples come to her pre-birth program, her presentations are totally from a musical point of view. Mom and dad do very gentle movements while very beautiful music is played. In the successive classes, they talk about the development of the child, especially in relationship to music. They make musical materials like rattles and bells. They chose music for the child and the unborn child. This is a self-contained program where the parents come every week for a certain number of weeks until they deliver the baby.

Planning Program Schedules

A pre-birth program can be a set of classes, that meets monthly for nine or ten months, following the mom's pregnancy, from very early pregnancy until about six weeks after she delivers the baby. At that point, the parents can choose to join a parent/infant program. Or the sessions could be weekly, meeting weekly for nine or ten weeks. Then a few weeks later, another program starts with another set of parents.

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The Parent's Prepared Environment

The setting for a parent's program should be very relaxed and comfortable. You need oversized, soft furnishings. You need some rocking chairs. You need some pillows for the parents to sit on. You might want to play some soft music.

Fresh flowers add aesthetically to the environment. You are teaching the parents how to approach the child and also to recognize that all life is precious. You could have pictures depicting expectant families on the wall that complement your room. Stick to the pastel shades and soft lighting to create a mood of relaxation, rather than excitement.

The Program Format

The format for this program can center on discussions, where parents feel very free to share experiences about the baby. You can also assign observations to do at home about the movement of this particular child, about the child's awareness of the outside world or about learning experiences that the parents can do with the child. You can introduce the parents to the idea of communication with the unborn child through very gentle touching and speaking.

Communication with The Unborn Child

When a mother talks to her unborn child, the babies sit up in the womb and become very alert even early in the pregnancy. They listen because a mother's voice is very high pitched as opposed to a man's. Her voice signals the baby that some sort of learning is going to happen. So the baby is stimulated and becomes attentive.

When dads talk to the belly, to the unborn baby, the child tends to go to sleep because of the pitch and timbre of the father's voice. The deepness of the voice compared to the female voice is very relaxing for the unborn child.

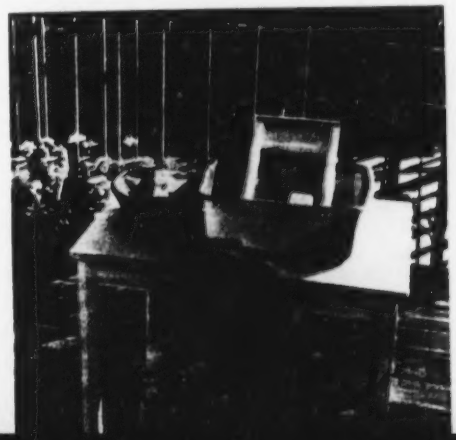
If mom is having a hard time at night, and the baby is kicking all over the place, all dad has to do is lean over and put his mouth close to the belly, rub mom a little bit, and talk to the baby, talk to the belly. The baby will become very, very calm.

The Benefits of Rocking

Present rocking techniques to demonstrate the importance of rocking in the physical maturation of the child. There are different parts to our ears—the outer ear, the middle ear and inner ear. The semicircular canals regulate balance and movement. They are filled with fluid and are located right next to the inner ear.

When the mother rocks the unborn child, she stimulates the development of the semicircular canals and the maturation of the child's ear.

A study has shown that all moms rock at the same rate, at the same forward and backward momentum all over the world. We have inherent in us the ability to help the physical maturation of our unborn children. As teachers, we can encourage relaxation and help the parents to attune their bodies to the body of their developing child.



Music for the Unborn Child

We can help parents select music for their child. Children like all types of music, whether it's country, pop, jazz or new age, but you need a beat that is flowing and gentle, rather than one that calls you to get up and dance. That will come later.

Unborn children definitely enjoy music. They like native American pipe music very much. A really good artist is Naki. They like classical baroque music. They like Bach and Mozart. They don't particularly care for Tchaikovsky or Beethoven selections because they are overpowering. They like to hear individual instruments whether from a piano concerto or just a series of drumbeats.

We encourage parents to sing to their unborn child, establishing a loving bond with the child through song. Research has shown that if moms and dads sing to the belly, the child gains weight, the child grows longer in length, the child sucks more, the child gets more nourishment through the cord. It's proven fact.

The Child's Prepared Environment

Our goal is to have parents attuned to the developing child so the mother becomes very aware of this child who is growing inside of her own body. As teachers, we can also introduce the parents to the idea of an appropriate prepared learning environment for the child. We can help the parents to prepare for the child and to prepare for the birth. The idea of a low bed for the child or a basket could be introduced for the baby to sleep in once the baby comes home. Parents should use simple furnishings for the child's room, soft lighting and soft pastels rather than primary colors.

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Montessori and Resources for Infant Educarers (RIE)

Part 2: Similarities

By Deborah Greenwald

One thing that I do want to say is that the RIE director now is Anna Tardos, Dr. Picker's daughter. She was the experimental baby, the first baby to be raised with this philosophy. What follows is an extensive philosophical discussion boiled down into manageable pieces. It is by no means comprehensive.

As Grazia Honegger's work becomes more well known in the United States, I believe Montessori Infant/Toddler care here will develop a stronger nurturing focus.

When I started my master's thesis, I was very familiar with Magda Gerber's work at RIE, but I didn't know much about Dr. Pickler. I wanted to compare Montessori's work with RIE. When I learned that the theorist for Magda's work at RIE was Dr. Pickler, my study then became a comparison of Montessori philosophy with that of Pickler and Gerber.

Because I had worked with Magda at RIE for such a long time, I am more familiar with her perspectives. In my study, I refer to Magda and Pickler interchangeably. I switch back and forth between the two depending on what subject I am presenting.

I also switch back and forth because these two worked within different contexts. Magda worked with different childcare providers, parents, and children with special needs. In general, the population attending RIE classes is affluent and European American.

The staff at the Pickler Institute cares for children who have survived traumatic experiences such as abandonment, abuse or neglect. Approximately forty children live there.

My study identified similar, complementary and contradictory philosophies between those of Montessori and Pickler. This is a distillation of my study comparing these two philosophies.

Similarities in Theory and Practice

1. Freedom of Movement

The first similarity is the emphasis on freedom of movement as an essential part of healthy development. Grazia Honegger strongly validated this point in a private conversation. I think that this is an element that is not yet well understood in some Montessori infant/toddler programs I observe. Montessorians are close but not as refined as in RIE theory and practice.

For example, I once saw in a video a child of about fourteen months approaching a chair to climb in to get ready to eat. She was just getting ready to sit down on the chair. Her knee was raised. She was ready to climb in herself. She was not asking for help.

There is a definite pattern of movement in the developmental maturation process that can be observed when no one interfere. There is an elegant unfolding. No teaching is necessary for gross motor development—none at all.

The caregiver, from the back, without eye contact or verbal explanation, picked her up by the arms and put her into the chair. This kind of intervention makes me cringe. That child's competence was not respected at all.

One of the first things we learn in infant/toddler care is to approach the child from the front to let the child know we are coming. And, you should never pick the child up by the arms because you can really mess up their shoulders.

A trained Montessorian would

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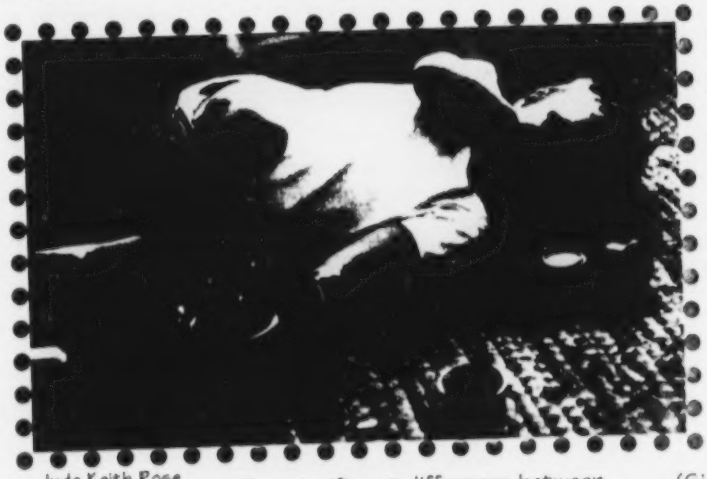
MONTESSORI AND RIE, PART 2 continued from page 11

cringe if she observed a teacher take a spoon from a child attentively working on a spooning exercise and then finish the child's job. This kind of intervention should never occur in any childcare environment.

We Montessorians talk about respecting the child's development of control of movement. At the Pickler Institute, there has been in-depth analysis of the control of movement. There is a definite pattern of movement in the developmental maturation process that can be observed when no one interfers. There is an elegant unfolding. No teaching is necessary for gross motor development—none at all.



Jude Keith Rose

Learning How to Fall

At the Pickler Institute, I learned that if you catch a falling child, the child learns to reach up whenever he or she falls. Then when you are not there to catch them, falling can hurt the child even more because they are not prepared to fall. Learning to fall is a critical skill.

Allowing freedom of movement is a passion of mine. We can't go into full detail about it here, but I do want you to understand its importance. Remember, Anna Tardos was the first experimental baby. Her mom, Dr. Pikler believed that she did not have to sit Anna up or teach her how to walk. Emmie Pckler did all the loving, caring mommy things for Anna and then laid her down on her back on a soft, smooth, clean surface. Anna later said, "I was the first child. It was absolutely an experiment. I could still be lying on my back."

Anna is now in her late 60's. Following the child's ability to develop naturally really works. It is incredible to watch. When I watched the children at the Pickler Institute, I was also amazed at the quality of their movements and their attention span is astounding.

One significant difference between our usual relationship with children in Montessori and the work at the Pikler Institute is that the babies at the Pikler Institute are not going home to mommy and daddy. They will never be put into walkers, a bouncy seat or any of those containers. I want to use the word pure to describe their experience.

2. Waiting for the Natural Development of Movement

Many of the children at the Pikler Institute have special needs. Some are not sitting up or crawling with their trunk off the floor as early as most children in the United States. That makes it hard to convince caregivers here that respecting the child's movement is essential.

Because we are Americans, we want everything to happen faster and sooner. What we found is that babies need to spend tons of time rolling, crawling, slithering, even hopping on a knee. They spend a lot of time kneeling. They crawl for a long period before they can sit up. Some of the children even stand before they can sit.

3. Process Versus Product.

Getting to sitting is much more important than sitting. I teach caregivers that there are so many things going on during this process. Rolling on the ground is a baby's exercise. They don't need artificial exercise. You do not need an exersaucer in the classroom. The plan for movement is innate in each child.

Even the American Academy of Pediatrics is starting to speak up. They are saying that walkers can not only fall down stairs, but also actually interfer with physical development. Children in walkers are walking later (Siegel and Burton, 1999).

Once you start to observe, you can actually identify walker babies. When they are not in their walkers, these children look as if they are falling forward all the time.

4. Common Research Methods

Another important similarity between the two philosophies is the common research methods employed. Both Montessori and Pikler were interested in a naturalistic and scientific approach to study child behavior. They each came from a background of observing from an anthropological point of view. They both observed the phenomena of ontogeny

recapitulating phylogeny, i.e., the development of the individual organism repeats the evolutionary stages of the development of the type of animal or plant. Montessori wrote more about this than Pikler.

They both knew that we have to allow children freedom of choice and freedom of movement in order for them to learn from their own actions. Setting up controlled experiments does not teach us about the true child.

In her book, Dr. Montanaro calls involved care activities **handling**. **Handling** is the time when we have a task to accomplish together whether it be diapering, eating or other similar activities. **Holding** is the time when we are with a child and we are not asking for anything from the child. We are just there together. (Montanaro, 1999)

In contrast, Gerber calls these times together **quality time**. Gerber calls holding time **wants nothing time**, the time when we do not have an agenda. She calls handling **wants something time,** the time when we ask the child to come in and "Work with me on this."

As Montessorians, this makes sense to us. We want the child to be involved in self-care and the care of the environment. When you have a specific group of children to care for, this is your chance to develop one-on-one time and build relationships. This is the curriculum. It is not a time to move through a caregiving activity quickly so you can get on to looking at flash cards.

Here, in the United States, we need to portray our practice in photos and in our writing so that it lines up with our philosophy. For example, a photo of a teacher showing children a picture of a tiger probably has nothing to do with their real lives. This portrayal of our principles makes me crazy. Why use this particular picture to make a point.

When the relationship between theory and practice is seamless, Magda calls this **praxis.**

When I was nineteen and kind of a hippie, I wanted to put pictures of planets on the wall at the child's eye level. I thought that would be neat. My boss, who is incredibly wonderful, said, "How about a picture of a ball or something they might see in their daily life?"

She gently guided me to the idea

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that infants need to see pictures of things they know, especially at such a tender young age. They need to get a sense of the world around them, to be able to name an object, to describe it, to know it and to be comfortable with it. I understood her point.

6. Observe the child

We know a lot about observation. Magda calls her observation **object free observation.** That means that we are not actually going in looking for something.

Observation is one of the hardest skills to teach. I really don't know how to teach it. I struggle with it. Observation has to be practiced. I know that, as a caregiver and as a student of child development, I have come to love observation with an almost religious fervor. I fall into it. I can just be there.

I am beginning to understand what **object-free observation** means. I hope my skill continues to develop. I have learned so much through observation. I know that many of you have also.

The idea behind object-free observation is that you allow the child to show you what's going on. We can get into danger by having a checklist. We may just be waiting for a specific behavior to happen so we can just check it off. With this mindset, we can miss the quality of the behavior. Magda reminds us, "It's not so much **what** they do as it is **how** they do it."

Grazia Honegger describes observation as an attitude rather than a technique, the ability to sink into the moment with the child and observe. It's a way of being with a child.

The one thing I try to convey to my students is that when we observe in a classroom, our goal is essentially to disappear. But, as the caregiver, we still remain present in the room. We do not disappear. We are always juggling our observation with our activity. That takes skill.

When we observe in a classroom, our goal is essentially to disappear. But, as the caregiver, we still remain present in the room. We do not disappear. We are always juggling our observation with our activity.

If you do not want to distract the children, I suggest that you do not write. Go into the room without your clipboard and pen. Avert your gaze. Be as boring to the children as you can possibly be. Dress in neutral colors, like gray. Don't wear attractive jewelry. With all these precautions, children will still find you interesting.

Jude Keith Rose

One time I was observing with a colleague who hadn't thought about her dress. She wore a skirt that was covered with fruit. She walked out of the room at the end of the day shaking, swearing that she would never wear that skirt during an observation again.

I have clothes with little pictures on them—my seductive clothes—that I wear when I want to bring children in to me, when I want to help them feel comfortable with me.

You want to do just the opposite when you are observing. You want to be boring. The children may crawl up to you and tug on you, only to find out that you are very boring.

With toddlers, I usually just say, "I'm just watching." And then I will look down. I won't make eye contact. I won't reach out. I might give them a little tiny smile especially if they look worried. I used to not say anything and then I found that they are so used to adults interacting with them that it sometimes causes them to be concerned when I don't say anything.

They usually go on with their activity, but there is always going to be one who is not going to let you go. Then you can just get up and go to another room. It's hard for us because we are geared toward

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nurturing. Observing requires a completely different role for us.

When you are in the classroom with the children, you are taking care of them—and you are observing them. During the caregiving moments, you must be aware of the child's attention. What is it that the child is attending to?

2. Family and Parent Education

Family and parent education is an integral praxis, theory and practice are one. The Montessori, Pikler and Gerber programs each emphasize the importance of the family as well as working and communicating with the parents.

The field of infant/toddler care is new and growing rapidly—it's in its own infancy. Therefore, we have a different role than caregivers in the pre-primary or elementary classroom. We are almost mothering the mothers and the fathers.

It becomes much more intimate. Some parents do not want to leave. Some parents stay for hours. Some mothers nurse their baby. Some of them cry. They are just emotionally naked. They are so vulnerable when they are leaving their child with you. We work constantly with ideals and reality. They are leaving their heart and going to work.

People are different in their needs. Some mothers and some fathers stay in the room for as much as two or three weeks before they can leave, although personally, I have never had anyone stay that long.

There is a process in separation. At first, mommy is on the floor playing with the baby and talking with the caregiver. Then mommy moves out, sitting a little farther away in the background, playing with the baby a little less.

In my toddler class, I handled separation at this point by giving the mother something to read so her attention left the room. I said, "You don't really have to read this, but pretend that you are reading it."

The children really noticed. They would go over to the mom and bang on the book to call the mother's attention back to them. If the mother persisted, eventually she could sit in the room and be ignored. That is the ideal solution.

There have been situations when I felt it was necessary for the mother to leave the room. I also had situations when the child honestly wasn't ready for separation and I had to say that too. My director always *loved* that! We did not have an infant room in that program, so what I was actually suggesting was that they go home for a couple months and then try again.

3. Consistency and Predictability

Everything has a place and everything is in its place. And that, in an infant environment, includes the caregiver. The caregiver is so much of the environment in this program. We are the climber, the spittoon. We are everything.

One of the biggest problems we face is caregiver turnover. Many classrooms are constantly losing teachers. That is very damaging for children. It's an advocacy issue for sure. In the RIE, philosophy, there is the concept of a **primary caregiver** who is with the infant each day.

Grazia Honegger uses the term **reference person** for the caregiver who greets the child every morning. Even in the 3-to-6 classes, we talk about the person who greets the children each morning. With infants,

Deborah Greenwald's professional experience has been directly related to infant and toddler care and parent/infant education.

She is currently the Infant Toddler Specialist for Children's Services Center, Pensacola, FL, responsible for training and assisting child care providers in centers and homes, developing training programs, collaborating with local agencies, and consulting in the development of a model infant toddler care center.

Before joining the Children's Services Center, she served as the Parent-Infant Guidance Class Facilitator and live-in caretaker at the RIE Institute in Los Angles where she first became acquainted with Magda Gerber and the RIE philosophy.

Deborah has a strong Montessori background. She has been a faculty member, Montessori Teacher Education Center of the San Francisco Bay area since 1998, a lead teacher in the Infant Toddler Parent Program at Pacific Oaks Children's School (1996-98) as well as a lead teacher for the Toddler Class and Parent Education Coordinator at the Montessori Early School, Pensacola, FL (1994-96)

Deborah has both an AMS Infant Toddler Certificate and an RIE diploma. She completed her MA in Human Development in 1999 from Pacific Oaks College, Pasadena, CA, specializing in Leadership and Human Services. She has a BA in Liberal Studies with a minor In Women's Studies in 1993 from Humboldt College, Arcata, CA.

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we have a much smaller group so the greeting is more intimate. It's much more physical.

9. Contextual Similarities Between Montessori and Pikler

There are many contextual similarities between these two practices. The more I learn, the more I could write. Montessori and Pikler were both female physicians when that was really uncommon. Montessori was a little older. They both experienced war during their lifetimes and worked with children who were growing up in those times.

They actually met in Hungary when Dr. Montessori made some kind of presentation in Budapest. We don't know much about it. I call my paper a theoretical dialogue. I tried to visualize what they would say to each other. What would they agree with? What would they disagree with?

They were both scientists. They studied children from a scientific perspective. They were right in there with Piaget, an epistemologist, with their scientific inquiry about the child's development and behavior. They both have a maturational perspective—the idea of sensitive periods or readiness—that you can't teach children to do something that they are not ready to learn. When they are ready, it just happens. It explodes.

C. Community Behavior

Montessori and Pickler both value community behavior in the group, but approached it differently. In Montessori, one of the ways that we ask children to respect the classroom community is by leaving other children to their own peace, to their own study. We interact with them but we respect their right to individual activity.

In RIE and in Pikler, there is a much more open approach, a problem solving approach, if you will. For example, what happens when one child is playing with a ring and another child wants it? The care-giver does not intervene and say to the eight-month-old, "He had it first."

Jude Keith Rose

We just move in and say, "So, you both want the same one. You are both pulling on it. I'm not going to let you hurt each other." We touch softly. But we don't come up with the solution. I lean toward RIE/Pikler on this one. I think it is a more realistic approach and prepares children for real life.

Montessori approaches problem solving from a ground rule perspective. We have basic rules of respect for each other.

To me, the Pikler/RIE approach is more organic. What happens? What really happens? I am not always going to be here to sort this out for you. How are you going to work it out togethe?. There are still basic guidelines. "I won't let you hurt each other. I value kind and gentle behavior."

I don't consider two children pulling on a toy to be a big problem. Physically, pulling is very attractive to both of them. It feels really good. How many people have toddlers who hang on things? They love that feeling. I think we all need to have bars about in the rooms for toddlers to reach up and hang from. They like the tussle and the dramatic engagement with another. Many children smile in this process.

I have also seen the object in question dropped and the children go off in different directions. This example illustrates valuing community in different ways.

The Conclusion of this series will appear in a future issue.

Bibliography:

1. Montanaro, S, Understanding the Human Being: The Importance of the First Three Years of Life. Neinhuis Montessori, 1999.
2. Pikler, Emmi, The Competence of the Infant. Acta Paediatrica Academiae Scientarium Hungaricae, 1979.

An extensive bibliography from Deborah's thesis is available from *Infants and Toddlers*, PO Box 146, Placitas, NM 87043.

If you are interested in visiting the new model environment in Pensacola which blends Pickler's approach with Montessori, please contact:
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We can help them make materials. We might have the parents make the first mobiles for the child, whether it's a black and white mobile, a simple sound mobile like a bell for the very young babies or a combination color and sound mobile as the child gets older. Whenever the parent makes something for the child, it is very, very special. It becomes a very loving gift from the parent to that particular child.

Symbiosis

We can also speak to the parents about the importance of the first six weeks of life after the baby is born. Montessori called this time the period of symbiosis when the family gets to know each other and this new baby. The baby also gets to know them, away from internal distractions, jobs and all kinds of outside people and external distraction. It is a very gentle time.

Where such programs already exist, such as in Italy, Montessorians act as true Assistants to Infancy. They remain with the parents through the last weeks of pregnancy. They accompany the family to the birthing suite or remain with the family at home until the birth of that particular child. They assist the mother with relaxation techniques during the birth and they offer very gentle care to both the mother and the child at the moment of birth. Here we have peace and harmony.

2. Parent/Infancy /Toddler Program

The Family's Prepared Environment

From birth to three years of age, the parent and child need to come to a physical place where they can learn together as a family. This place should resemble a house or a home, rather than a school building.

Because the family is so important to the child at this time, you need to address the issues of the entire family. Parents are searching for guidelines as to how to parent. They are looking for the best ways to arrange their homes for their child. And, they are searching for ways to teach the child about life and all its mysteries.

There must be a space for play and learning. There must be a space for rest. There must be a space for movement and a space for preparing and sharing a meal. A bathroom is necessary for hygiene. A kitchen is needed for food. A garden has to be there, at least for flowers, even if the garden is just little tubs. If it's a big garden, you could grow many other things.

And there must be a space outdoors to go for a walk. Very young children need a place to walk. They don't need fancy gym equipment. They just need you to take them outside and go for a walk at a very slow pace. Ideally, this area would be a part of your school, maybe on the school property—or part of your children's house.

Program Schedules

Ideally, these programs would meet as often as possible. In Chicago, where the schools are very large, there are parent/infant programs or parent/child/toddler programs that meet every single day, mornings and afternoons. In any case, these programs should at least meet once a week. At the school where I work, we offer the parent/infant/toddler programs once or twice a week during the school year. When parents sign up, it's for an entire school year.

In the summer, we will have a summer camp with many things to do outside in addition to the regular on-going Montessori program. We will offer the summer parent/infant/toddler program on multiple days of the week in connection with the summer camp.

Parents can choose one day a week, two days a week or three days a week. For the summer, at least for the parents in my community, it is easier to offer multiple times during the summer because during the year they might be involved in other programs.

In this way, parents of young children come to play together, to learn together and to sing together.

Program Formats

The format can be one of observation and parental discussion. Observations can be done in class or at home and can be related to child development issues or Montessori issues. Observations can be recorded in a journal that remains the private memories of the parent or the

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parents can share their journal—or at least, the ideas or the observations in the journal—with the whole group. Sometimes they just share them with the teacher in private.

Sometimes, I assign an observation for parents to do at home and then use that experience to initiate the discussion in the next class. For example, in the fall for our harvest celebration, I ask the parents to take their children to a farm or a pumpkin patch—not to the local grocery store—and let their child pick out a pumpkin. I ask the parents to bring that pumpkin to the next class for our harvest celebration.

It is very interesting to see which type of pumpkin each child will choose. When the children are in the age of strength and endurance, they bring a pumpkin that is usually bigger than they are. When they are in the age of very fine motor control, they bring these tiny little gourds that they hold from the tiny little stubs.

Each pumpkin looks different. Some are round. Some are cylindrical. Some are kind of crooked and have no base. Some have no tops because the child lost the top on the way, carrying it. It is very interesting to see what the child chooses—not what mom and dad wanted them to bring. When we talk about why each child brought whatever he or she brought, everybody in the group learns from an exercise as simple as choosing a pumpkin.

Parental discussion also can be based, not only on the journal entries, but also on various topics. In my group, we talk about a specific topic each month. I have articles for the parents to read, at least three articles each month, some related to Montessori and some to parenting articles.

As teachers, we prepare the learning environment. We teach the presentations to the children and

the parents in this program. We observe the ongoing development of the child and we recognize the progress in both the parent and the child. We role model parenting techniques and we keep the environment very dynamic, alive and full of wonder.

As Montessorians, we present the method as it pertains to the child within the family. We recognize that each child has a potential that they are working on. We strive for independence for each child in everyday things. And, we help the parents create a home where each child is a vital member of his or her own family.

For those of you who work in a school or a center or a children's house where programs for young children already exist, a parent/infant/toddler program or a parent/toddler/child program is a nice complement and addition to the existing programs.

And in those countries, such as England, Italy and now more and more, in the United States, where there are birth-to-three programs, there are also programs where both the parent and the child are present. These programs flourish. I've personally been presenting a parent/infant/toddler program for about twenty years. The benefits to the parents through this program are just astonishing. Now we have a mechanism for peace in the family.

3. The Parent/Toddler/Child Program

The Conscious Absorbent Mind

From the ages of three to six, the child moves into the age of the conscious absorbent mind. This child is different. The child needs to come to a place where the absorbent mind is free to learn. It must be a place

rich in life and it must contain the lessons necessary for life. Think about that. We all worry about the academics. We all worry about the materials and how to arrange my space, how the traffic flows, where to hang up coats or what to do about their boots in the winter in a climate that gets snow or rain.

Instead, your environments should present life. Your lessons are life lessons. It's not only a place of academics. It should be a place of communication, sensory awareness and grace and courtesy. That is what life is.

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Here is a place where the child is able to seek out the work of development, a place where a child can take a presentation and follow it wherever it will lead him. It should be a place where variations are possible. They should be encouraged. It should be a place of music and song, cultural diversity and natural growth.

At this stage, we see the child who is going to make some choices. "What do I want to learn? What is it that I want to learn today?" This child is not interested in what you want him to learn. Yes, we have our curriculum. Yes, we would like this child to do this and that child to do that.

No, this child says, "What do I want to learn today?" The child says, "How do I want to learn today?" And the child also asks, "At what pace do I want to learn?" It certainly is not our pace. It's not another child's pace either. It's that particular child's pace.

The Importance of the Child's Own Choice

It is essential that we allow the child to make these choices. We must let this happen. We can't be rigid. We have to trust the child, that the

child can accomplish his or her own goals for learning. If you observe the child, you will see that happen. We are truly the guides.

We wait for that moment to present. Have you been in that moment? You see it! You see it in the child's face. The child is ready for it. Or they may come up to you and tug on you as if to say, "I'm ready. I'm ready now!" Or the child may just put the material right into your hands or right in your face. At that moment, it's time to present.

We wait for the moment when it is time to take that child to the next step. Have you been in that situation? You are sitting with a child. They are doing the presentation and all of a sudden you realize that they are ready to jump. They are ready to go to the next step. They are ready for a variation. They are ready for something new related to what they are doing. But we wait.

We don't impose ourselves. We wait for that moment to take the child to the next step. We wait for that instant when the child sees. Have you been in that moment? You are presenting and the child gets it! They see. They really do see! Then we step back and we wait. We let the child go on by himself or herself. Yes, we could do it. We could come up with all kinds of creative ideas but the child just took off on his or her own. And we watch it happen.

This is the age of the learning quest. Each child is on a journey to refine and develop his or her own individual time line. Much knowledge is sought at this age, building on that which has come before. All areas of growth are really taking off. The child prepares to catapult, to jump to the next level, to the more advanced level or to a new level. This child is firmly immersed in reality in the concrete world. This child is storing all of these images from reality that will make the jump to abstraction—to the whole abstract universe. It's an exciting time!

Parents Are Ready to Learn

The parents of this age child are also seeking new knowledge just like the child. They are extremely interested now in the educational approach that we call Montessori. They are curious about the parts of the Montessori environment. They want to know about each area of the classroom.

They may not come to tell you directly, but did you every watch the dads? They come in, look at shelves and then they look at the ceiling. Then they look at the shelves again. They are telling you that they want to know what their child is doing. Or have you ever heard this one? "My child's been here three months and all she does is wash her hands. What is going on?"

They are asking for information. They are not being critical. They are saying, "What's next?" and "What else is there to offer?" and "What is this place that my child comes to?"

Parents are also curious about the method itself. They will ask you directly or indirectly, "How did you give that presentation? How did you teach my child whatever concept it is? How can I do this at home? How do I discipline my child?" Or they may say, "I don't know what I am doing? What do I do with him at home?" This is also another way they are asking you for information about the method itself.

Involve Parents in the Process

This program should welcome parents as well. Just as the education of the child proceeds forward, the education of the parents should parallel this. Many times, those of us who work in the three-to-six environment

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concentrate only on the child. Yes, we have seminars once in a while. We might have workshops. We have parent conferences twice a year and we've done the interview with the family. But have you educated the parents? Are they being educated as much as you are educating the child? Think about that.

For the parent and the child to be in harmony, the lessons must be presented in this place. And the lessons of life must be fostered with parents as well. The format for the children is the Montessori classroom and all of its richness. It is a philosophy of trust and respect which places the child in the center of the learning experience. It is a recognition that life is precious and life is essential. It is an education of the person and all facets of that development.

Program Format

The format for parents programs consists of parental discussions or forums on a monthly basis. You can initiate the program topics or topics can come from the parents. Topics of interest to parents of all young children, no matter what their ages, include nutrition, sleep, discipline, communication between parent and child, grace and courtesy and natural materials. These are all hot topics that are very popular. You will always get a good response from parents on these issues.

Other issues could relate to child development. You can talk about the emergence of language, especially for the children who are really beginning to communicate verbally. You can talk about literacy for the older children. You can talk about movement and perceptual motor development.

Presenting the Montessori Method

It's time to present Montessori not only to the children, but also to the parents—both at the same time. The Montessori approach to teaching then goes home with the child every day in a new and exciting way. You know that Montessori needs to be reinforced at home by the parents and by all the other adults that come in contact with the child.

The child seeks reaffirmation of their Montessori experience at home. The interesting thing is that the child becomes the teacher at home. We need to help the parents become open and receptive to everything that the child does. By guiding our parents to recognize and accept what the child brings home, we can actually help the child grow in the Montessori method itself.

As the child moves through your prepared environment, absorbing all the riches that you have there, the parents can journey along too. They can follow this entire process as the child unfolds his or her full potential. That's the philosophy part.

You can present Montessori methodology through discussions and demonstrations in each area of your environment where parents have the opportunity for hands-on experience. Talk about the life of Maria Montessori, the sensitive periods, and the idea of a child-centered approach to education.

Most parents are not aware of these concepts. We grew up in the age of a teacher-centered approach to education. Adults need to be educated about what we are doing.

Includes Group Socials

You can also plan small group meetings and socials. Parents learn when they have a cup of coffee together, share a soup pot or attend a potluck. You can talk, mingle, adding something here or there when it's needed.

A Breakfast Outing

I treat my families by taking them out to breakfast. The families come with their children. We go some place that's very child friendly, of course. And we warn the staff ahead of time. That gives them time to bring out child-sized utensils and cups, for example. They also know to serve child-size portions. Sometimes we have a breakfast buffet and let the children choose.

We prefer places that give us a lot of help and serve food in a nice timely pace so we can accomplish our goals and help the children at the same time. During that time, we talk together about nutrition, food preparation, how to eat in a restaurant with a child and the grace and courtesy needed in a restaurant.

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Role Modeling Social Behavior

Sometimes a child exhibits behavior that is not socially acceptable, such as running around. Since I am very comfortable being a role model, I just become the parent. I go to the child and role model for the parent how you could solve the problem. I could give the advice directly to the parent, but when I assume the role of the parent, I am both the teacher and the parent, so the child sees me in a different light. And the child may actually be more cooperative with me than with the parent.

At the same time, the parent sees how I talk to the child. I might take the child by the hand and we would walk together. Or I might say, "Gee, I see that you need to take a walk. Would you like to go outside?" You really don't know why the child is running around. It could be that the child had enough to eat, might not like what is being served or might have an allergy to the food served in that restaurant.

I have one son who was upset every time we took him to a seafood restaurant. It turned out that he has allergies to seafood. Every time he smells it, his eyes water and his nose runs. We would get up and leave. So, you have to figure out what is happening. I role model for the parents to help them. If the parents are upset by the situation, if they are embarrassed, I make sure I take the time to talk with them afterwards or call them later on the phone.

You have to think about all these things before you are going out to eat. But I have taken groups as big as twenty-five family pairs. If mom and dad and the child come, that means three times twenty-five. Plan carefully, know what you are doing and where you are going and talk to the restaurant staff beforehand. You can do it.

You can hold parent orientations, parent courses and workshops, either indoors or outside. There are various ways to use a newsletter, which is one of the most powerful tools you have for parent education. Make it effective. Include the news of the classroom and also teach parents about the method. As teachers, it is our responsibility to educate both the child and the parents.

Summary

The child from birth to six is also in an age of discovery, refinement and curiosity about all of life. It is important for the parents to

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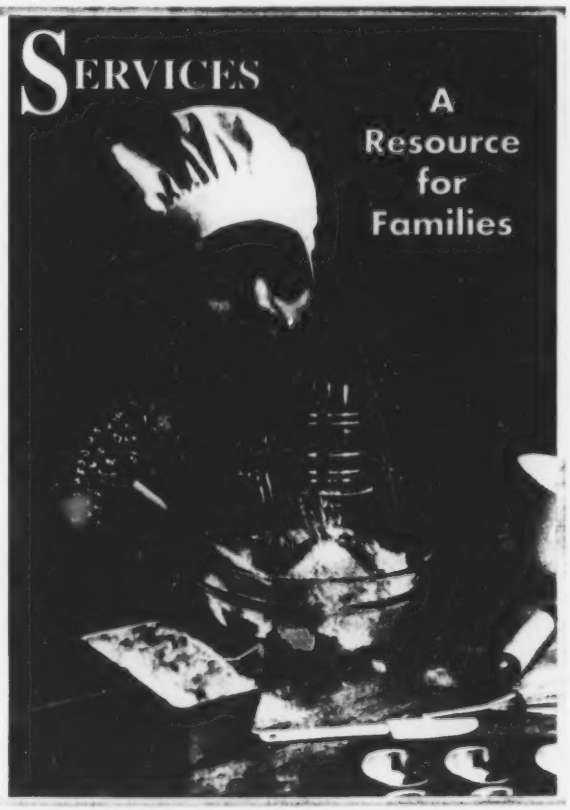

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understand the child's drive to learn, their love of learning for itself. We must be aware that it is the process of learning that is important for the child. It's not the product. It's not the piece of paper, It's not the book. It's not what they have written or even what they have drawn. The child is the product. The child is the most important product. We need to communicate this clearly to the parents.

It is our role to prepare and provide the learning environment for the child, to draw the child back to nature. We must also respect this place where the child comes. As Montessorians, we must remain true to the method. We must recognize that each child is a separate, unique individual. We must remember that this child is on a quest for learning, on a journey to become that special person that they were born to be.

The child is not an extension of us or of any adult. Each child is an expression of himself or herself. We are truly the observers of the child in the universe. The child knows himself. The child can be in harmony with his body and his mind. The child can be at peace with himself and the world. The child has so much to teach us if we only watch and listen with peace and respect.

Bibliography

1. Picchetti, Patricia M Timeline of Growth, Montessori Life, Special Edition, Fall 1993, pp 11-14.
2. Picchetti, Patricia M Sensory Awareness in Infants. Infants and Toddlers, Part 1, Vol. 3, No 1. Spring 1999 and Part 2, Vol 3, No 2, Summer 1999
3. A Sense of Wonder (3-6 Child) Michael Olaf. A parent resource.

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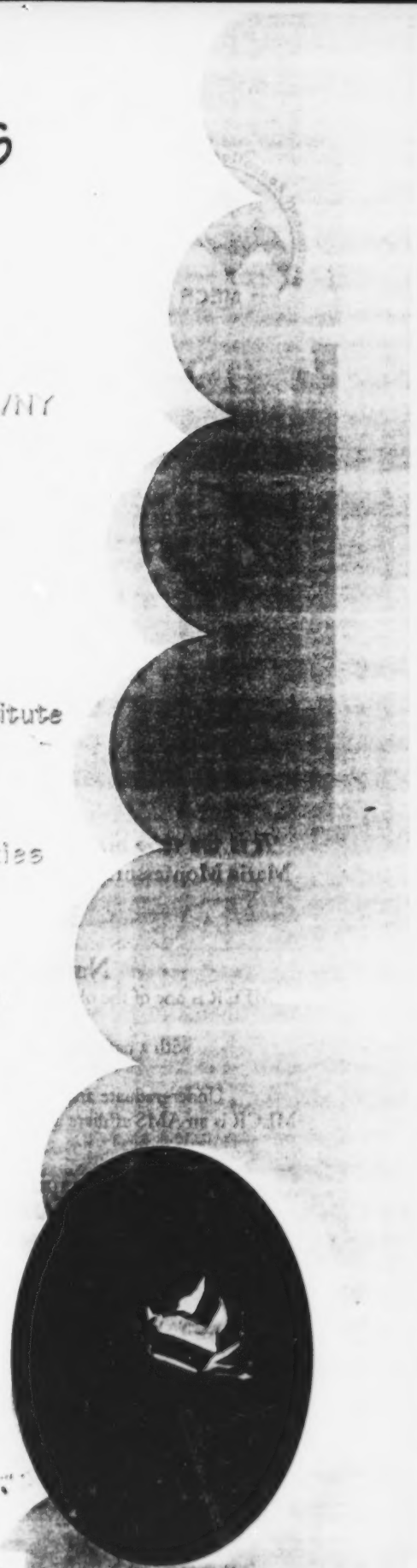

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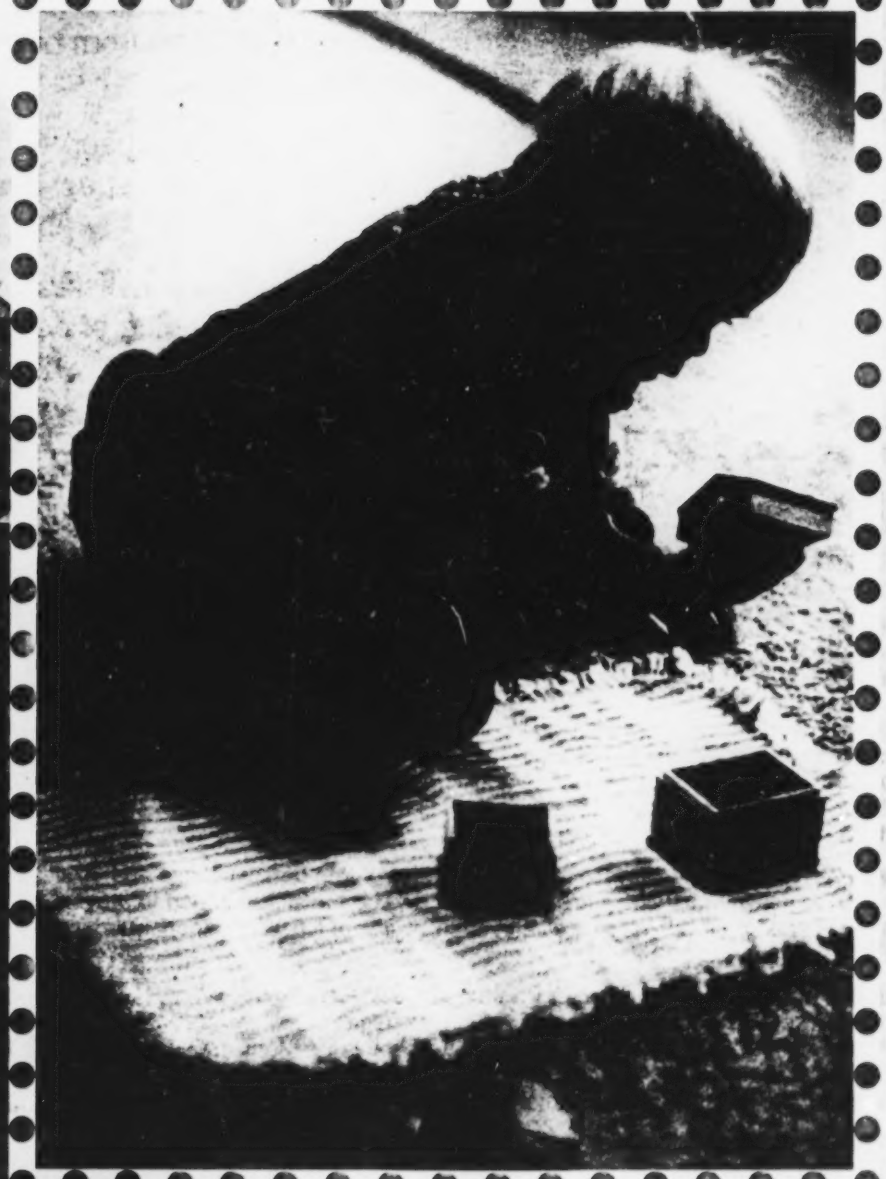

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Editorial

Why Not?

There is still some debate about what it is that we are ultimately doing. Is the Montessori movement an educational movement, a social movement or a cultural movement?

There has never been a debate in my mind. I knew from the first time I encountered information about the method that this was something that spoke to our humanity, no matter how young or old we are. I knew that all that we do in a Montessori setting has profound influence on all aspects of our lives. Montessori is a social movement, a cultural-change movement presented through the experience of a new educational approach.

I would have been convinced of the importance and value of the movement if it had only been an educational movement. From the time I started in the traditional education setting at six, I watched teachers and observed life as a student. I knew something was wrong, something was missing.

My first conscious awareness came the day, in first grade when my teacher slapped my hand for trying to read ahead of the group.

Was it something about what teachers do, was it the process—or something about me. Maybe I was inadequate. I sensed, even that young, that something about this experience violated my personal dignity. I dealt with it by trying to do whatever the teacher asked so she wouldn't slap my hand again.

The next sixteen years were filled with many other observations of the social and emotional indignities to us as students—discouragements to learning. I was even told that I was "too sensitive." I decided I could never be a teacher.

Imagine what a revolution it was for me to find Montessori where the child is respected as a person and as a social being who is at the center of his or her own learning.

We pass on our cultural views in many ways, certainly in the way children are treated in our schools. Parents, also, are not treated with respect for their part in the process. Mostly they are demeaned and denounced as inadequate and unwilling. Is it not more likely that the educational culture that they experienced is simply extended into adulthood? They are not generally welcomed as a co-teachers and co-learners in the process.

Many of you are already very actively involved in helping parents understand a new way of thinking about children—and themselves. You are offering them new ways to think and act, a new life style, a new culture in the home.

Many of you are working on expanding this help to parents. So are we. *Infants and Toddlers* exists to help all of us come to a better understanding and experience of our humanity, of our magnificent capabilities, our uniqueness and our sameness.

Why not share the insights and information found in the journal with your parents and the public? Why not try bulk mail?

Lillian DeVault Kroenke

Ask Ginny...

by Ginny Varga

Q What is the ideal ratio of adults to children in an infant program? In a toddler program?

A That is an impossible question to answer precisely because it depends upon the size of your room, the shape of your room, the ability of the adults and the way that you prepare the environment. And I am not talking about square footage or licensing requirements.

If you have a first year teacher who has just finished a training program, I recommend a much smaller group because you must insure the success of that teacher if you want to keep her and have her grow in her own experience.

Let me first skip to toddlers for a moment. I would say ten children with a new, first year teacher with an assistant would be perfect for a five-days-a-week toddler program, possibly twelve children. With ten, you can assure greater success.

For infants, I think that three infants with one adult is considered ideal. That is probably just about as many as you can take care of. Remember, it depends upon the teacher's experience and her knowledge of child development. If you know, for instance, that there are non-mobile infants, an infant will probably only lie on its back happy for no more than fifteen minutes. If the baby cannot roll over, the child will cry because the child needs you. We are their transportation.

I have taken care of three or four at a time and I have felt good, patting myself on the back, because I know that a child will lie there so long. So before I do something else, I move the child before it cries. I know that by observing. So I can move three or four children before they cry and keep them happy. They are always happy when I sing to them. They are the only ones in the whole world who have ever shown happiness when I sing to them.

So, a teacher without that experience might wait until each child cries. Then maybe one child to an adult would be sufficient. The experience and intuition of the teacher determines the quality of the care of each child. It is not just according to the numbers. That is why this is such a hard question to answer.

For future issues, please direct your questions to:

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Montessori and Brain Research: Leading the Pack by Nearly a Century

By Mary Ellen Maunz

Printed by special arrangement with the author

By the year 1914, Dr. Montessori had attracted the attention of great luminaries in education and culture here in the United States. Many dignitaries, including Alexander Graham Bell and Margaret Wilson, daughter of President Woodrow Wilson, were very excited about Montessori's work by the time she made her first trip to the United States. Her first Children's House had started in Rome in 1906. But there were other things going on in the United States and in the field of education beside the opening of Montessori schools.

Montessori's Work Denied

In 1914, a man by the name of William H. Kilpatrick wrote a scathing denunciation of Dr. Montessori and her method. He was a colleague of John Dewey at Columbia University. There was a saying at Columbia in those days, "There is no God but Dewey and Kilpatrick is his prophet." These men were very influential in the world of American education.

Kilpatrick wrote that Montessori was "down right dangerous!" He also said that she was 100 years behind the times.

Montessori's Work Validated

I am here to tell you that Mr. Kilpatrick was two centuries off! Montessori was not 100 years behind; she was 100 years ahead of her time! We are just now beginning to catch up with scientific evidence that proves what she said about the importance of the prepared environment and the sensitive periods.

To me, that is most exciting. Science is finally beginning to understand the sensitive periods, which she intuited by using her loving heart, her brilliant mind and her labor with the children. Science today is telling us now that, yes, sensitive periods are real and the brain governs them. Sensitive periods are neurologically based.

The Decade of the Brain

We know more about the brain now in the last ten years than we have known in the entire span of recorded history. Congress called the decade of the 90's "the decade of the brain" and it really was. Yet as we move into the new millennium this year, we are not close to knowing everything there is to know about the brain.

> ***As stewards of the energies of the children we are privileged to care for, we owe it to ourselves, we owe it to these children, to become aware of what this research is telling us. We have to make Montessori relevant to the new century.***

As stewards of the energies of the children we are privileged to care for, we owe it to ourselves, we owe it to these children, to become aware of what this research is telling us. We have to make Montessori relevant to the new century. There are too many people who think that Montessori is some old-fashioned method. But it's not. It's on the cutting edge! I know that most of you who read this know this, but you need to be armed with the facts, to talk to people about why. That is what I want to share with you.

We understand that the brain is malleable—it's far more changeable than we ever would have imagined. We understand now that society, the way we live, is literally changing brains. We have a greater understanding of the role emotion plays in the brain. This is a very important aspect of our work with children and I will talk more about it later.

Tools to Study the Brain

I want to review some technological tools, which we now have at our disposal, that literally look inside the brain, and have allowed us to learn so very much about what is happening, when and where.

The first is the **CAT (computed axial tomography) scan.** Basically, what scientists do is send x-rays through sections of the brain. They assemble these cross sections into a three-dimensional picture of the brain. This enables them to see the relative size of the organs. It enables them to detect strokes, tumors and things like that.

The second is the **MRI (magnetic resonance imaging).** A computer reads data from radio frequency signals that are sent into the brain and reassembles them into a three-dimensional life-like image of the soft tissue of the brain. This allows scientists to see even more details of size and shape. They can even follow many of the chemical reactions important to the functioning of the brain and its ability to process information.

The third tool is perhaps the most exciting for our purposes, the **PET (positron emission tomography) scan.** If a child undergoes a PET scan and you ask the child to speak or to read, the doctor can actually observe where in the brain chemical reactions

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are stimulated. He can determine exactly where inside the brain specific information is processed.

The Physical Brain

Let's take a look at the brain itself in more detail. Put your fists together. This is the approximate size and shape of your brain. Using your hands is a great analogy because there are two hemispheres of the brain.

Scientists say that this human brain, which each of us has, is the most complex three pounds of matter in the universe. It is only because it is so complex, that we have the tools we need to begin to understand ourselves.

Neurons are the cells in the brain. The basic process of the transmission of impulses is an electrical charge. When the charge hits the cell body, the impulse travels down through the axon to the end where it hits a synapse. The synapse is a little tiny space joining the axon of one cell and the dendrite of another cell. There are 76 chemical neuro-transmitters in the brain. These allow the impulse to jump from the end of one axon to the beginning of the next synapse or the beginning of the next dendrite.

One current focus of research is the effect of diet on neuro-transmitters. It will be important for us to learn more about this because it will help us discuss diet with parents and prepare snacks for children that might help develop the neuro-transmitters.

The Stuff of Intelligence

Basically, science tells us that the connections between neurons are the stuff of intelligence. It doesn't matter how many neurons you have. It depends on how connected they are.

Experiences connect the neurons—sensorial input. So, for our work with young children, the important thing for us to know is that the experiences we provide in our prepared environments, the communicating we do with young children in those environments, build brain tissue and the connections develop and grow stronger through repeated use.

Child-sized, safe fruniture encourages independence.

Think about a young infant who is sitting in a white room in a bouncy seat with nothing to do. This child is not going to have many experiences that nourish the connections between the dendrites. Remember Dr. Montessori's experience with the children in the asylum. They were so desperate that they were playing with crumbs of bread. When she gave them what they needed to stimulate their brain cells, what happened? They were able to score on classroom tests similar to normal children. Adults provide the impetus for the development of the connections.

Basically, science tells us that the connections between neurons are the stuff of intelligence. It doesn't matter how many neurons you have. It depends on how connected they are.

According to Dr. Martha Pierson, a neurobiologist at Baylor College of Medicine, children need a "flood of information, a banquet, a feast." This early stimulation or education, if you will, shapes the neural structure in the brain. Wide, early exposure is thought to assist the child's processing capability that will provide the opportunity to handle multiple tasks later in life. Sounds like she is describing an enriched environment in a Montessori classroom!

The Physical Parts of the Brain

In addition to the brain being divided into the two hemispheres, it's also divided into lobes. The **prefrontal lobe**, the forehead area of the brain, controls movement and the executive functions. The parietal lobe, the area on the top of your head, handles touch and sensations throughout the entire body. It also governs taste. When he was eating Mexican food, my father always used to say that it was hot enough if he could feel a tingle at the top of his head.

The **occipital lobe,** the area at the back of the head, governs vision. If a person is hit severely in the back of the head, it can blind him even though there is absolutely nothing wrong with his eyes. The two lobes on the side of the head, **the temporal lobes**, are among the most complex. Here we find memory, hearing and language activity.

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The Functional Parts of the Brain

Another way to look at the brain is to divide it into functional parts. Dr. Paul McLean, who was the head of the National Institutes of Mental Health some years back, developed a model of **triune brain theory**. Based on the evolutionary path of human development, the most ancient part of our brain, which is shared with other lower forms of life, is **the reptilian brain**. Some call it **the R complex**. The R complex contains the **fight or flight** mechanism along with some of the unconscious vegetative processes that keeps us alive.

The next thing that developed is **the limbic brain**, which is also called the emotional brain, isolated in the center of the brain. Many feelings and memory experiences are processed there—among these are territoriality and sexuality. The limbic brain contains multiple functions, one of which is acting as the alert system.

Then there is **the neo-cortex**, which is five times larger than other parts of the brain. This is the thinking part of our brain that we are more familiar with.

Let me tell you a story about how these three parts of the brain work together. Imagine that you are sitting outside, enjoying a cup of coffee and somebody throws a brick at you. The first thing that happens is that your cortex looks at the event, "Oh, my gosh, there is something red, about six inches long and three inches wide, that is heading right for me." The limbic brain is terrified. It feels fear. The R Complex takes action. The R Complex says one thing and one thing only, "Duck!" What do you do? You duck.

The R Complex overrides the other areas of the brain under times of stress, according to researchers. Leslie Hart has written extensively about this. Geoffery and Renata Caine have also written a lot about this phenomenon in their book, *Mind Shifts*. They call the process of going into the R brain for self defense **downshifting.** *(Caine, Caine and Crowell, 1998)*

The Effects of Fear

Now think about your own experience when you were a child in school. Were you ever afraid of the other kids? Were you afraid that they might tease you or put you down? Were you ever afraid that the teacher might scold you? Were you ever afraid that someone might actually hit you or that you might let your parents down? Were you ever afraid to try something because you didn't think you could do it or that you would be embarrassed? Were you ever afraid that your mother might not come and get you?

Now think about your classroom. Could any of these things ever be happening?

All of the experiences of fear tend to put us into the R Complex part of our brain. And when a child is in the R complex, he is unable to access the neo-cortex, where learning takes place.

The Danger of Downshifting

The danger that causes downshifting doesn't have to be a physical danger. It can be an emotional danger or a social danger. All of the experiences of fear tend to put us into the R Complex part of our brain. And when a child is in the R complex, he is unable to access the neo-cortex, where learning takes place.

The Caines believe that a great deal of failure in the school system occurs because the children are afraid.

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Dee Coulter, who has spoken at various Montessori conferences, talks a lot about children getting stuck in the R Complex. This can be the result of a child who lives with chronic fear—of neglect, or abuse. Their brain gets flooded with stress and fear hormones. They literally get stuck in the state of fight or flight. They are on edge all the time, looking for threats and often misreading facial expressions or casual gestures as threatening.

I have seen this happen. I worked in some low-income schools where I observed children who came from very abusive homes. These homes can be high income as well.

The way Dr. Coulter explains it is that the child's energy flows out and, normally arcs back to recharge for another exploration. The child who is chronically in fear cannot do this. He does not have the ability to get control of himself.

Calming the Fear

She suggests that, when you have a child who is really afraid, a child who gets angry at the drop of a hat, you can create an enclosure, like a barrel or tent, and line it with soft carpeting. She encourages the children to go into the enclosure at will when they are feeling out of control. Then, when they feel their energy, when they feel centered and in control, they can come out again.

Obviously, you don't want to condemn the child to "sit in the enclosure." But it is there when they want it, and many children learn to take care of themselves. They know that they need to feel secure. It is like swaddling a baby who is crying frantically. Sometimes you just have to hold them and wrap them so they feel totally secure as you help them bring those energies back under control.

Montessori's Calming Insights

Maria Montessori understood the exquisite delicacy of young children. At the emotional level she understood how important it is that we create links between home and school. She understood that our heart and soul gently calls to the child and never frightens or humiliates him.

Make sure parents are an active and comfortable part of your center.

At the cognitive level, she understood the importance of analysis of difficulty. We take a complex skill and break it down. We don't let children fail. We let them go as slowly and carefully as they need to go. If a child is shy and wants to watch, we respect that need. Maria Montessori intuitively understood this at a time when nobody else did.

And, of course, the more loving we are, the more accepting we are, the more we support the children in their

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development. It is not only Montessori schools that get the answer right. We all need to understand what happens to children when they feel threatened.

The Right Brain, Left Brain and Whole Brain

One of the things we have learned a lot about in the last couple of years is information about the right brain and left brain hemispheres. We know that if you tend to be right-brained, you are more holistic and intuitive. If you tend toward being more left-brained, you are more logical and linear.

What the new research is showing us is that no matter what you are doing, even if you are doing a very left-brain analytical activity, your brain is firing on both sides. We are a whole brain species.

What the new research is showing us is that no matter what you are doing, even if you are doing a very left-brain analytical activity, your brain is firing on both sides. We are a whole brain species.

That means it is very dangerous to think, for instance, that a child is right-brained or left-brained and somehow define him and his learning opportunities through that definition. Yes, we each have our strengths of how we process information, but we do use both sides of the brain in virtually everything that we do.

Hemisphere Functions

There are many subdivisions of the brain, all of which we are learning about—what they do, how they work. Nobel Prize winners Dr. Roger Speery and Robert Ornstein discovered, in cases where there has been severe brain damage, that you can actually separate the two hemispheres—and the two can actually function separately. In drastic cases, one entire hemisphere has been removed and life goes on. The brain has certain remarkable abilities to re-route functions. (Speery and Ornstein,)

Between the two hemispheres of the brain there is a tissue called the corpus collosum, which is thicker in women than it is in men. A woman is usually known for being a little more intuitive, for integrating her feelings into her thinking more than men typically do. Maybe it is because there are more connections between the holistic right side and the logical left side.

The Integrated Brain

Thomas Blakesley, author of *The Right Brain*, suggests that the best performers in our culture are those people that have learned to use both sides of their brain. Leonardo De Vinci is a perfect example. He actually went in cycles of his life when he would work strictly on his art and then he would go strictly into science.

Thinking on a strictly superficial level, you might think art is right-brained and science is left-brained. I took my elementary training in Bergamo and had the opportunity to go to all the great museums in Florence. Standing in front of Leonardo's painting called *The Annunciation*, the docent told us that every leaf in that painting is botanically correct if you look at it under a microscope.

Then I realized that his art was where he put his left brain detail and analysis. For his science, he invented the helicopter and the submarine. These were completely intuitive and speculative. For him, science was the complete right-brained intuitive side and his art was his left-brained logical side.

What Blakesley is saying is that a person who can get the whole picture of something with the right brain, be intuitive, stay in touch with the heart, and also have a very well developed left brain verbal ability and logic, performs the best.

What the Brain Research Tells Us

I want to discuss the research of some of the major researchers to see a little bit more of this synergy and its validation of Montessori. As I said before, the brain is a very highly complex subject. Although we are learning a lot year by year, from the days of the black box when nobody thought there was anything we'd ever be able to know, there is still much to learn.

Nature versus Nuture

A fundamental issue in brain research is whether the brain is a finished product at birth or whether it, in fact, changes. There has been a debate in this culture for years focused on nature versus nurture. Do you have the parameters of identity at birth or do you develop them through experience. Interestingly enough, as with many of the great issues of life, it is not this or that. Rather it is the synthesis of both.

Many researchers are starting to say that about fifty per cent of who we are is genetic. The other fifty per cent is a function of how that genetic potential is either used or not used. For example, theoretically, you could have two children with the precise same genetic potential. However, the one with an enhanced and loving environment may accomplish more in life compared to the other child.

Exceptions to the Rule

And, of course, there is always the exception to the rule when a child, who comes out of the worst possible environments, does well. There is a case reported in the Chicago Tribune about a seventeen-year-old boy who

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was elected senior class president. He was brought up in an area of Chicago called Cabrini Green, one of worst, tough ghetto areas of Chicago.

When he was about eight, he called a social worker and said, "Get me out of here." She interviewed him. His mother said, "Hey, take him. I don't care." He was placed in a series of foster homes. He literally picked himself up by the bootstraps. He has all kinds of college scholarship offers. You could just see the light coming out of his eyes. He is a beautiful soul. He had to do all this by himself. But there are an awful lot of kids out there who cannot do it by themselves.

A Timetable for Brain Development

So, does our culture affect how our brains work? That's the question. The consensus of scientific research is that every action you do with a child assists his brain to grow—every action you do. This leads to new questions. For example, is there a timetable in the brain for these actions? Dr. Montessori's understanding of the sensitive periods becomes a guidepost.

Science is starting to say yes to the idea of sensitive periods. Sensitive periods in education have not traditionally been well received or accepted. But now, with the technology to see what is occurring in the brain, it is possible to validate the powerful organization, via learning, that is taking place in the child's brain, and to identify at least some of the specific areas of development.

Structure and Function

Dr. Kenneth Klivington, of the Salk Institute in San Diego, says that structure and function are inseparable. It is absolutely correct that the way that the child uses the brain will physically change it.

One of the major researchers in this field, Dr. Marion Diamond, UC Berkley, has been working with rats. Rats actually have a brain structure similar to humans. For forty years, she has been working with rats to determine what environmental stimulation changes their brains. (Diamond, 1997)

You can take a group of rats, put them in a cage with lots of toys, change their mazes every day, get them to play and interact with each other and give them nutritious food. Then take another group of rats and put them in a cage by themselves, without toys, change in mazes or nutritious food.

The first group of rats in the stimulated environments had cortexes which grew sixteen per cent larger. That is a substantial growth! They have increased dendritic branching. In laymen's terms, that simply means that when you look at the neurons, there are more dendrites that make the connections between the cells.

Brain Connections

Do you know that every single dendrite can make connections to twenty thousand other dendrites in the brain? So the possible number of connections is beyond our ability to conceive. But the more connections there are, the more stuff of intelligence there is for the child to use. Some doctors call the structure of brain cell connections the **neural architecture.**

The Role of Repetition

How many of these connections are sustained by repeated experience? A one-time experience may not cause these connections to be maintained. The repetition of the experience anchors the connection. And, of course, the importance of repetition is one of Montessori's basic understandings.

So, with true enrichment, nerve cells increase in size, increase in synapses and connections between the brain

Mary Ellen Maunz ***has been involved in Montessori education since 1972 when she received her AMI preprimary diploma. Since that time she has gone to Bergamo, Italy for the AMI elementary training and became a master teacher trainer after a four-year mentoring program with Dr. Elizabeth Caspari, a personal friend and colleague of Dr. Maria Montessori. Dr. Caspari has been training for more than twenty years.***

A school administrator for many years as well as a teacher and a trainer, Mary Ellen designed and supervised a Montessori infant/toddler program after studying with Dr. Silvana Montanero. She has been active nationally and in South America as a speaker on early childhood education, most especially brain research and early literacy. Her first book, co-authored with Dr. Celeste Matthews and Randall Klein, Learning to Read is Child's Play is soon to be published.

Mary Ellen served as a commissioner for accreditation and board member for the Montessori Accreditation Council for Teacher Education (MACTE) for seven years and is currently vice-president of the International Association of Montessori Educators and Director of Barrington Country Day School in Barrington Hills, Illinois.

cells. Dr. Diamond tells us that we have learned that every part of the nerve cell alters its dimension in response to the environment.

Diamond also found out that when they stimulated a pregnant rat, her babies had larger brains than if they had not stimulated the pregnant mother! These neurological changes are highly significant effects of differential experience.

She was asked the pointed question, "Does this really apply to humans?" Dr. Diamond responded, "There is absolutely no doubt to those of us in the field that culture changes brains. Whatever children are learning, as these nerve cells are getting input, they are sending out dendritic branches.

"As long as stimulus goes to a certain area, you get more branching. If you reduce the stimuli, the branching stops. The cortex, the thinking part of the brain, is changing all the time. This is true in the brains of cats, dogs, rats and man."

Dr. Diamond has written two wonderful books on this subject. *Enriching Heredity*, is the more scholarly; *Magic Trees of the Mind*, is more of a mass-market book. The latter is wonderful and really worth reading to get a layman's understanding of her research.

The Bottom Line

The bottom line is that environmental stimulation makes and sustains connections in the brain. Connections grow stronger though repetition. The connections that are not usea die off. They are deleted in a pruning period before birth and again later on, at several intervals. When we understand this and we understand more about the specific sensitive periods, we see that we are on the verge of understanding a whole new level of the science of life that both Dr. Montessori and Gardner talk about.

Myelinatization

An interesting aspect of how repeated experience works in the brain is myelinization. This process of coating the axons and connections in the brain with a protein that acts like insulation. Myelinization allows electrical impulses to travel through the brain more efficiently.

When pruning occurs, the myelinized connections are protected and become impervious to all the chemicals that break down the neurons and the neuron connections. The non-connected cells dissolve away. Dr. Joseph Chilton Pearce has written about this chemical process in *Evolution's End. (Pearce, 1993)*

Sensitive Periods

Now I want to look more closely at the sensitive periods. To me, the sensitive periods are the most exciting part of this entire story. In the early nineteen hundreds, Dr. Montessori observed, understood what she saw and wrote extensively about it. She explained that children pass through periods of intense fascination and interest with certain specific experiences in their environment and with certain movements that correspond to inner developmental needs.

Children pass through periods of intense fascination and interest with certain specific experiences in their environment and with certain movements that correspond to inner develop mental needs.

We now understand that these are neurologically based. The sensitive periods provide a timetable for the neurological development that takes place in the brain. According to author, Jane Healy, some of the most eye-opening research in neuroplasticity shows that there are critical, sensitive or optimal periods for certain types of mental development. *(Healy, 1990)*

Dropped Stitches

We know through Montessori's teaching of dropped stitches that if some development in the external environment is not present, the inner process just doesn't happen. There is no "put on the brakes and let it happen six months later when you can provide the experience." Each specific period comes and goes. You must be on target with the stimulus in the environment that corresponds with the inner developmental need.

Senitive Period for Binocular Vision

I want to give you two examples that occur in the area of vision. Some children are born with one eye that wanders. This phenomenon is called amblyopia. Basically, what happens is that the two eyes do not focus together so these children lack binocular vision.

There is a sensitive period for the process of getting the two eyes to focus together. Treatment for this defect involves putting a patch over the good eye, forcing the bad eye to see. If this is not done soon enough, by age five the ability to focus the eyes together does not happen. Neurologically, the bad eye shuts down.

This is what happened to me. I literally do not see out of my left eye. There is nothing organically wrong with my eye, but I missed the sensitive period for getting my eyes to focus together.

Sensitive Period for Vision Itself

There is another very interesting set of research experiments done on the neurons devoted to vision itself—just being able to see. This occurs between two and four months, which is also when Dr. Montessori told us that babies begin to watch our mouth. This

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period peaks around eight months. About two months of age, babies really start to notice what is going on around them. By eight months, each visual neuron has made connections with about fifteen thousand other neurons. So, you want to make sure that babies see lots of things in those early months.

Blocked Vision Experiements

But what if something prevents the child from seeing, what if something blocks vision? In the 1970's, two scientists from Rockefeller University, Dr. David Hubel and Dr. Torsten Wiesel completed research that won them the Nobel Prize.

Using some newborn kittens, they sewed the eyelids of one eye shut on several kittens for several weeks. When they opened the eyes again, the kittens were blind in that eye. The sensitive period for visual stimulation had come and gone without external stimulation. The neurons from the right eye that was blocked migrated to the left eye. The vision in the left eye was actually enhanced and was better than normal.

This result is astounding. This was the first hard scientific data to show that, yes, there are sensitive periods and if you miss them, some developmental process is not going to happen correctly.

This holds true with human babies as well. Periodically, children are born with cataracts. For a long time, doctors felt that it would be too traumatic to operate on a newborn baby. They decided to wait until the child was about two years old. Because they waited, the babies were not able to see properly. They became partially blind for life because the sensitive period of sight came and went.

Critical Periods and Sensitive Periods

It is important to realize that science now differentiates between true *critical periods of development*, where absence of stimulus results in a complete failure of a function to develop and *sensitive periods*. In sensitive periods, as Montessori accurately described them, learning may be easier and quicker, but failure to provide stimulus is not so devastating.

Time and space to explore and play together is an important part of the sense of security building community.

Think about what it would be like if we really understood all of the critical periods and sensitive periods—the physical, social, emotional, mental, and perhaps the spiritual periods—and geared experience around them. This is the science of life.

The Science of Life and the Sensitive Periods

Harvard University's Howard Gardner, the author of *Frames of Mind, Multiple Intelligences* and many other wonderful books, made a wonderful comment that reminded me so much of Maria Montessori. "A comprehensive science of life must account for the nature as well as the variety of human intellectual competencies." *(Gardner, 1983)*

In the early 1900's, Dr. Montessori spoke of the science of life. And here we have Gardner, at the end of the 1900's, saying exactly the same thing.

I want to present more research on the sensitive periods. We have had a toddler nursery for about twenty years and in the process of working with the toddlers, we observed a certain behavior. We began to think that it was a sensitive period for getting involved in a social group.

We found that many times, toddlers will just start making noises. The other children will look at them and this behavior becomes the invitation to enter the group. I think there is something going on with the way one integrates into a group that has to do with making noises.

I don't know if this behavior qualifies as a sensitive period, but it is something that I'd like to research. I'd be interested to know if anyone else has seen this.

Mathematics

There are sensitive periods for mathematics. This is great. The sensitive period for establishing the patterns and the mathematical mind is from birth to four—really early. Expose toddlers to simple math. Math is a language. Count with children. The more you say things like, "Let's cut the apple in half. You get half, I get half," the more you are creating the recognition of the language of math.

Mario Montessori one time asked, "What if we did to children with language what do to them with math? What if we said, 'Oh, this is too hard. Let's wait until they are five or six.' What if we waited until they were five or six to talk to them? We would have

a lot of people who couldn't talk."

In the twenty-seven years of experience in our school, we have seen over and over again that the more children experience math concepts at early ages, the more adept they become.

Spatial intelligence, geometry and number sense begin to develop early.

John Chattin-McNicols, in his book, *The Montessori Controversy*, cites the research that children who have had as little as one year of Montessori math in preschool do better than their peers at age fifteen. Clarity of concept, and I think also absolute confidence that "I can do this. This is cool. I like this!" creates the mindset that "I can do math." *(Chattin-McNicole, 1992)*

The set of courses leading to advanced math and the high tech jobs that utilize higher math is often called the math pipeline. Children, especially girls, fall out of the math pipeline by eighth grade.

So—let's incorporate this awareness that the sensitive period for understanding math starts very early, and give the children we serve the opportunity to pursue their dreams.

Sensitive Periods for Music

Music is another area where we have some very solid information about sensitive periods. Interestingly enough, the neurological circuits for music are almost identical to the neurological circuits for math. The same parts of the brain are affected. If you think about it, when you look at musical notation, the patterns are all mathematical. Unless you are a musician who knows how to write music and understands all that, you wouldn't even think about it. But music is very precisely mathematical.

Music and Spatial Reasoning

According to the pioneer researchers in this field, Frances Rauscher and

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Gordon Shaw, at UC Irvine, children exposed to classical music do dramatically better in spatial reasoning. Even as adults, if we were to sit here and play Mozart for fifteen minutes in preparation for a spatial reasoning test, for about twenty minutes you would score sky high but then your score would drop off.

Stop to think about it. If there is a way to increase spatial reasoning, what about all the other forms of intelligence? Maybe there is music that would stimulate other areas of our brain. This is an area open for much more research.

But what really matters to me is not the fact that you can get your scores to go sky high for twenty minutes. It has been shown that a group of three-year-olds, after taking singing and basic keyboarding in a group for eight months, scored eighty per cent higher than their peers on a spatial reasoning test. That is a pretty substantial result.

Help young children develop perfect pitch by playing a note and saying its name.

The sensitive periods for learning music are primarily three to seven, a period exactly in the age range of our children. Children exposed to music before the age of seven, develop a part of the brain called the planum temporale, which grows physically larger.

Developing Perfect Pitch

Researchers have also done some studies about perfect pitch. They actually polled career musicians, composers, conductors, musicians in chamber orchestras, and so forth. Only those people who started studying music before the age of six had perfect pitch. Perfect pitch can be developed by anybody if music is presented from three to seven. So, haul out the bells if you are not using them.

My teacher and mentor, Dr. Elizabeth Caspari, was a musician for many years before she became a Montessorian. She said that many times she has visited Montessori schools where she saw the bells, but they were silent. When she remarked to the teacher that she did not hear the bells, the teachers often told her that the children weren't ready for them. She responded, "I'm sorry, but it is the teacher who are not ready for them."

Corresponding Changes in the Brain

Researchers in Germany discovered that children who played string instruments have substantially larger developed areas of the cortex that correspond to the fingers that they use when playing. What is really interesting about this is that it doesn't matter if the child practices five minutes or an hour a day. What does matter is that the child started young—between three and seven. This is the time to let the brain grow with music.

There is a book called *The Mozart Effect*, by Don Campbell, that I found very interesting. He recounts much of the research in the area of music. They are actually using music in many hospitals. They can cut down on the level of anesthesia needed by a fairly substantial percentage because there is a process called **entrainment.** *(Campbell, 1997)*

When Baroque music or some Chinese music, among others, is played, the heart and the breathing start to synchronize with the music. This entrainment also creates a lovely level of calm and peace in the classroom. The logo movement of Baroque music is sixty beats per second, approximately the same as the rhythm of the human heart. It is a nice addition to the classroom, at least some of the time.

Sensitive Periods for Language

Now, I want to talk about language. There are many sensitive periods for language-the reproduction of sounds, the development of syntax, vocabulary, phonemic awareness, grammar, writing and reading. Each of these has a sensitive period. Dr Montessori has taught us a lot about this, but there is even more to learn.

Starting in the Womb

Language development apparently starts in the womb. Studies have shown that babies who are talked to in utero tend to become more highly verbal than children who are not talked to.

We know that babies can hear in the womb. Dr. Anthony De Casper, of the University of North Carolina, fixed up some soft headsets. He asked mothers, before their child's birth, to read the baby the same story everyday for the last two months of the pregnancy. Then after the child was born, he placed the headset on the baby. He replayed two recorded stories, the one that the mother had been reading and another story that the mother had recorded, but had never read to the unborn child.

Beautiful books in a comfy library area encourage literacy activities.

The recording experiment was somehow set up so that if the baby sucks at one rate, he would get one story and if he sucks at a different rate, he would get the other story. Each of the babies studied always sucked at the rate that got them the story that the mother had been reading to them while they were in utero. *(Klaus and Klaus, 1991)*

Moving with Mother's Voice

There is a wonderful book, *The Amazing Newborn*, by Marshall and Phyllis Klaus that describes many of the things that the baby can do before birth. One of the things they present is that babies start moving in utero to the exact rhythm of their mother's voice. And if you watch the baby afterward, their little spontaneous movements, they move in synchronization to their mother's voice. Of course, babies born to deaf, mute mothers do not display this behavior. They do not learn to talk very well until they are around speaking adults.

Acquisition of Oral Language

Another sensitive period is for the acquisition of oral language. This is one of the proven critical periods. If a child does not acquire any language by the age of ten, he will never acquire the ability to speak meaningfully.

I watched a program on Nova about a girl found in Los Angeles in the 70's. Her father locked her in a little dark room strapped to a potty-chair. When she was found, her father shot himself. The mother was indicted for child abuse and was later acquitted. The child was taken to the children's hospital in Los Angeles for a number of years to try to help her.

Someone worked with her intensively on language development up to the point where she could say words.You could hardly understand them because her ability to articulate was so poor. But she could not make the leap into syntactically correct sentences. She could not formulate a sentence.

Just as with the Wild Child of Aveyron that Montessori talked about, there was dramatic improvement up to a point and then it just wouldn't go any further. It is really a tragic story because the people who were caring for her lost their funding. The girl then went from foster home to foster home. She is still alive and is somewhere in her thirties now, but she has never progressed past that initial point of language development.

Developing a Phonological Sound Map

The ability to acquire language begins with the development of a phonological sound map in the brain. This occurs in the first month of life. Gradually, the child will lose the ability to accurately hear and process the speech sounds of languages other then the one he hears. So, we might think about hiring multi-lingual people in infant centers and playing tapes so babies can hear the sounds of other languages that can be imprinted into the neurological map.

If the child has only heard the sounds of one language that is what he will speak with ease. Dr. Harry Chugani's comment on this early language acquisition is, "Who is the idiot who decreed that learning a foreign language should not begin until junior high school?"

Dr. Montessori had it right when she recommended that children should be exposed to at least two or three languages and they should have them right from the beginning.

Once the perceptual map is complete, the more words the child hears, especially in the second year—which speaks dramatically to the toddler teachers and the parents of America—that's when the vocabulary just blossoms. The more words a child hears, the more he or she will be able to say and the more words they will be able to recognize.

Learning Syntax

Tests with children who are deaf show that there is a neurological sensitive period for learning syntax—the way we structure our sentences—as well. The speech that deaf children need to hear can be signed to them. Isn't that amazing. It shows how flexible the human brain is.

If you start to sign with the child before six or seven, the deaf child has the ability to develop perfect syntax. If you wait until after seven, its too late.

The Importance of Communication

So how much conversation do young children need? How many words do they need to hear? UCLA's Dr. Arnold Schiebel wrote, "Without being melodramatic, I think it would be very important to tell parents that they are participating with the physical development of their youngsters brains to the exact degree that they communicate with them and interact with them.

Language interaction is actually building tissue in the brain. It's also building futures. The language centers of the brain are simply unable to attain full maturity without ample stimulation."

This helps to explain the developmental language delay that we see in children from certain environments. I am at a loss to explain

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exactly why, but the research is definitely solid on the fact that very low-income poverty-level people do not talk to their babies. They just don't do it. They let the younger children help take care of them and they don't talk to the babies. There is a strong tendency to give orders rather than discuss.

There is a wonderful book I want to recommend, by Todd Risley and Betty Hart, *Meaningful Differences*. If you haven't read it, you should. The authors report extensively about language patterns. The more you talk to children, the more elaborate the sentence structure you use, the more language development takes place.

In the first three years of life, the child from the low-income family hears a certain average number of words, the child from the blue collar family hears double that and the child from the college-educated family hears many, many times more. There is a huge gap in the difference and each year the gap gets wider and wider.

When you think about what it takes to get into college, to get a job, the required vocabulary, the SATs; all this is very strongly linked to language skills. It is very, very important for people to talk to their babies.

Children from high socio-economic and college educated families come into first grade with a more extensive vocabulary than children from low-income parents. Isn't that amazing!

We need to get information out to the public. We need to have some kind of TV show where we tell parents to talk to their babies, work with them using whatever there is in the house. Talk, play with pots and pans. Just do it.

This is a social issue. We are losing the potential of millions of our children in this country because parents don't know how to interact with them.

Interaction is Mandatory

There is yet another associated issue that relates to parents who out of immaturity or illness, or substance abuse, fail to interact at all, or interact with harshness with their babies. The results are disastrous. A very important book, *Ghosts from the Nursery*, by Robin Karr-Morse and Meredith S. Wiley explores these problems in great detail. If you work with at-risk children, this is mandatory reading. (Karr-Morse, 1997)

I also think we have to re-look at the way we give lessons in our classrooms. Dr. Montessori always told us to give our lessons silently, because the child will look at your mouth instead of your hands if you speak.

My observation is that this is somewhat age related. But I have come to realize that, because some children are so highly verbal, if you don't talk to them a little bit about what you are doing, you lose them. I am definitely of the mind that you first want to look at the learning style of the child. It's not a dogma that you don't speak when you are giving a lesson. How do you get this child's attention, how are you going to work with him or her best? At least think about it.

It is very important that we structure our day in our Montessori classrooms to include the circle time. This provides social interaction, talking and the opportunity to gain poise that comes from sharing in front of other children.

Developing Higher Reasoning Ability

Alexander Luria, another Russian who has been very influential in psychology, insists that language development is essential to the physical development of the brain's higher reasoning center.

He explains how it works. When the child names something, for example, "This is a steam engine," the child begins to understand that steam plays a role and that the engine moves.

In mastering words and using them, says Luria, "The child analyzes and synthesizes the phenomena of the external world using not only his experience, but also the experience of mankind." So, by words and naming things, we are giving the child the world.

A large world map makes a wonderful wall covering and heightens interest.

Naming the Child's Experience

When a child is given a name for an event, a name for an object that he is handling or working with, what is happening? He has multisensory input. For example, with the sandpaper letters, he sees it, he hears the sound, and he touches it. When you give the child the name of an object that he is holding, all this causes the connection of neurons in the brain.

The more the child has these experiences, the more connections are made. This is the stuff of intelligence. The name alone, after he has had the experience of touching and feeling it, will call up the experience. He can see it in his mind's eye.

Association of Emotion

Names also contain within them the emotion of the first experience with the name. When the child explores and brings home, let's say, a rock or some leaves, how does the mother respond? Do we encourage the child's exploration? Many parents are likely to say, "No, no! That is dirty!"

I want to share a story that will probably ring a bell with many of you from Dr. Montessori's Secret of Childhood.

"I once saw a child about two years old put a pair of dirty shoes on a white bedspread. Impulsively and without much thought, I took the shoes and put them in a corner of the room and said, "They're dirty." I then brushed the bedspread where they had been placed with my hand. After this incident, the little fellow whenever he saw a pair of shoes, ran up to them and said, "They're dirty!" Then would run over to the bed and brush it." Montessori, 1966)

So Montessori went through the same trials and tribulations that we go through!

I have to share another very similar story. We had a nut-sorting lesson. It was after Christmas vacation when we came back to school. I was demonstrating to a little boy that the walnuts go here, the almonds go there and the Brazil nuts go here. One of the walnuts was blackened and was starting to rot, so I got up and threw it away. After that every time he took the nut sorting activity, the little boy threw away one of the walnuts. The children do not differentiate. They see you do something and they have it nailed.

Learning from Quality Adult Conversation

Dr. Catherine Snow, of Harvard, has studied aspects of family life that are most closely linked to language development and school success. She's found that the quality of conversation that adults have with children is one of the most important factors. Parents, and teachers, who take the time to discuss issues, think over various possibilities of how to handle a situation to help children become better thinkers.

I love the idea of just planning a menu with a child at home or in your classroom, planning an activity or field trip with the children. At home, for example, decide that "We want to have spaghetti and meatballs for dinner. Let's see. What do we need? We need to get spaghetti. We need sauce and we need hamburger for the meatballs. What else shall we have? Shall we have garlic bread or a salad?" Then think through what else we need. Then look in the refrigeration to see what you have and go shopping to buy what else you need. You plan it, you gather it, you prepare it and then you eat it.

Processing Cause and Effect

Dr. Martha Deckla, at Johns Hopkins University at the Kennedy Center for Neurological Delay, has seen in the last ten years a huge increase of children with all kinds of problems. Many of these children come from families with incomes of three hundred thousand dollars or more with both parents working in law offices. They come home and put the bag from McDonalds on the counter. There is no processing of cause and effect.

Think about what the experience of planning a menu, getting and doing all steps of its preparation teaches a child about cause and effect—how to think, how to process, how to plan.

These are the executive functions of the prefrontal lobes of the brain. This is a very important function that many of America's children are missing because things are just put in front of them in day care and at home.

We have to provide these experiences in our schools and try to elicit conversations that are meaningful and that track the entire process. We want to help children organize their thoughts, think through problems and express their needs. How many of you have told a child to "use words" when a child was getting angry? "Tell us about the problem." "Let's see if there is another way to handle this."

We all do these things, but we can become more conscious of what our communication is doing to the brain. Research tells us that habits of the mind become structures of the brain.

Inner Speech and Self Control

Another aspect of talking through your problems is that it helps to develop higher level thinking skills—and it helps you develop self-control. Inner speech is basically the way we talk to ourselves. Young children do this out loud. We do it inside of our heads.

A group of toddlers had a little cobbler bench. They were shown how to hit the pegs. The children who were taught to say "One, one," each time they hit the peg, had far better success that those who didn't say anything.

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Children from the ages of three to seven in another study were placed in a room with attractive toys and food. They were told that the longer that they could wait before they touched anything, the more they would get. The researchers outside behind the one-way mirrors watched. They discovered that the children who could say, "No, Susie, don't,"—who talked to themselves—had better control compared to the children who didn't talk out loud. The other thing that they found was that ten years later, those same children were cognitively and socially ahead of their peers. There is something very powerful about inner speech!

An Aid to Memory

Children who use inner speech can remember information and events better as well. As adults we might unconsciously say to ourselves, "Okay, I've got to get to Joe's house by six. That means I have to stop by the library by four, the grocery store by five..." You talk it through in your head, sometimes internally and sometimes you mutter it out loud. This is the basic process. *(Vygotsky, 1986)*

Lev Vygotsky, author of *Thought and Language*, says that inner speech develops as the child learns to use language first out loud and then internally. If there is too much loud, demanding stimuli in the environment, children don't learn to take the speech internally.

A Montessori environment that is calm and well run is perfect for helping a child develop inner speech, even as he develops the ability to think and control his own speech.

The Acquisition of Reading and Writing Skills

Sensitive periods for the acquisition of reading and writing skills follow timelines as well. The sensitive period for writing is about age three and a half.

We have done substantial initial research on phonemic awareness. We are tending to think there is a sensitive period for awareness of sounds that begins about two and a half to four and a half.

Rhyming begins to appear about the second month of the fourth year and if it doesn't, you need to start doing some rhyming activities.

Reading begins between three and five. Grammar peaks between six and seven.

Sensitive Periods and Activity

I want to say just one other thing. This is really an affirmation of involvement with the materials. When you learn something because an adult tells you something, you are relying on an external authority. When you learn something because you did something yourself and you know it yourself, you know it more deeply. You rely on yourself. What is the difference in the psychology of the two kinds of learning? Which is helping the child learn to rely on his inner teacher?

The Importance of Interaction

In terms of the importance of activity with materials and auto-education, I want to tell you about the work of Dr. Jane Holmes Bernstein, of Boston's Children Hospital. She created a sphere with vertical lines painted black and white inside the sphere. In the middle of this sphere, she placed a teeter-totter-like affair, which turned. At both ends of the teeter-totter were little baskets. She put little kittens in each basket, facing outward so all the kittens saw were the black and white lines. One kitten was completely enclosed in the basket. The other kitten had its paws out, touching the bottom of the sphere and by using his paw movement, that kitten gave them both a ride around.

The kitten that did not interact with the environment was blind to the black and white vertical lines when it came out of that environment. He would bump into the edges of the table. This is a very powerful piece of research that shows that you have to interact. It's not enough just to see things. It's not enough just to hear a tape. You have to interact. Dr Bernstein explains, "Only the kitten who had his feet on the floor, knowing where he was going, aware of his position on the floor relative to the lines, developed those connections. Experience shapes the brain, but you have to interact with it."

Young children start paying attention to sounds with a basket of objects that all start with the same sound.

Moving Children Forward

Dr. Montessori tells us that the art of good teaching is not just preparing the environment. It is not just presenting the materials in order. Rather, it is to know exactly what material to present, when to capture

that child's interest and when he or she is just ready to take the leap into the next piece of material.

Vygotsky wrote about the **ZPD (zone of proximal development)**, the zone the child has to move through to move from his current level to the next higher level. I read a lecture that Mario Montessori gave in London with his mother when he described just exactly that point. We have all observed that if an activity is too easy, it's boring. If it is too hard, if it is too close to the top of that zone, what happens? Shut down. Overwhelm. The child doesn't want to try. So, we need to work through that zone very carefully with the child.

Scaffolding, Mediated Learning and The Three Period Lesson

Vygotsky describes something he calls **scaffolding**. We adults by our assistance, by showing the child how to think, how to handle the new material, can take him step-by-step through that zone. What does that sound like to you? The three-period lesson! Montessori was right on the money with the three-period lesson.

What do we do in the three period lesson? First, we demonstrate. In Vygotsky's terms, this is called **mediated learning.** In the first period, we mediate for the child what he needs to do and where he needs to go. Then what do we do? In the second period, we allow the child to take his turn. By the third period, he is doing it on his own. We are effectively scaffolding the child, following exactly the directions of this prominent psychologist. And, we are making the experience of learning as free from stress as possible.

Help Me Do It By Myself

We also have to be sure that we are not doing too much for the child. I am sure that many of you are living and breathing this truth everyday. Help me do it by myself. Whenever we do something for the child that he can do for himself, we are presenting an obstacle to development. And guess what—that obstacle is us. We have to learn how to get out of the way.

Having been a mother myself, I often think of this. With a newborn, you have to do everything, absolutely everything, for that baby. As the months go by, you have to observe. That's one of Montessori's cardinal principles. Look at that little arm. It's going into the arm of the shirt by itself. You work with the child and back off. Instead of lifting the child's arm and shoving it into the shirt, you let the child do it. At a certain point, the child starts to put on socks. You let the child do it. Little, by little, by little, we have to back off.

As teachers, we sometimes get into a rut. This is what we do. This is how we do it. But we have to continue to observe. And we have to back off as much as we can.

Steps to the sink make hand washing and water play an independent activity.

Concentration and Normalization

Another researcher, Dr. Mikhail Csikszentmihalyi at the University of Chicago, wrote a wonderful book call *Flow, the Psychology of Optimal Experience.* When you read that book, you will feel as if you are reading Dr Montessori. He describes exactly the concentration that is one of the high points of our work. When we see a child who is concentrating, we know that child is on the road to normalization. We know it will enable new levels of being to consolidate.

We see this amazing concent ration when we are fortunate enough to achieve what I call the great match— when we have given a child a piece of material that corresponds to his inner development. There is a total magnetism. He is locked to the material.

Csikszentmihalyi suggests that this kind of concentration is among the most sublime of human experiences. It is when we forget ourselves. We just lock in. There are all kinds of internal developments going on. And he is talking about what concentration does for adults. But we know that these experiences of concentration are where the real, solid neurological, psychological, social, emotional and cognitive development is going on for young children. *(Csikszentmihalyi, 1990)*

He describes this state of flow as something that can happen many different ways through many different

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kinds of experiences. In our classrooms, we see this amazing concentration when we are fortunate enough to achieve what I call **the great match**— when we have given a child a piece of material that corresponds to his inner development. There is a total magnetism. He is locked to the material.

Isn't it also like that for us when we are doing the work that we are just totally suited for? What if our culture made it a priority to help people find their true work? This is what, I believe, the science of the future will be all about—the correspondence of who we are with what we do. We help children immeasurably when we get them in touch with their inner teacher so that they will have the momentum and the strength within their being to recognize their inner self and what they really want to do. I have always thought that one of the greatest gifts that a Montessori education gives children is the encounter with their inner teacher.

I want to share this passage with you from Dr. Montessori's *The Formation of Man* (pp. 18-22) that brings us back to the ideas and ideals of the science of life.

"Either education contributes to a movement of universal liberation by showing the way to defend and raise humanity or it becomes like one of those organs which have shriveled up by not being used during the evolution of the organism.... The question is not to deliver man from some bonds but to reconstruct. Reconstruction requires the elaboration of a science of the human spirit. It is a patient work, an endeavor based on research to which thousands of people (that includes us) dedicated to this aim must contribute.

"Whoever works for this must be actuated by a great ideal, much greater than those political issues, which concern only the material life of this or that group of people oppressed by injustice or misery.

This ideal is universal in scope. It aims at the deliverance of the whole of humanity. Much patient work, I repeat, is needed along this road towards the valorization of mankind.

"Now, lest we think that we have to develop a perfect understanding before we begin," Montessori continues, "it is not necessary that the whole work of research be accomplished. It is enough that the ideal be understood and that the work be taken in hand.... To help life, this is the first and fundamental principle.... Our first teacher, therefore, will be the child himself, or rather the vital urge of cosmic law within the child that leads him unconsciously, not what we call the child's will, but that mysterious will that directs his formation. This must be our guide.

"I may affirm that the revelations of the child are not so difficult to obtain. The real difficulty lies in the adult's prejudices concerning the child. It lies in the total lack of understanding and the veil which the arbitrary form of education based only on human reasoning and still more on the unconscious egoism of man and his pride as a dominator have been weaving so that the wise values of nature are hidden.

"Our contribution, however small and incomplete, however insignificant in the opinion of those working in the field of scientific psychology, will serve precisely to illustrate the enormous obstacle of prejudice which are capable of canceling and destroying the contributions of our isolated experience."

I think that the obstacle of prejudice is important to keep in mind because we saw it in my opening words about Kilpatrick's attack on Montessori's work. I didn't tell you what happened after Kilpatrick issued his pamphlet. Every Montessori school in the United States was closed. And schools were not opened again until the late fifties. We have to be very aware that there are forces that would denigrate and deny everything we are doing because we are bringing forth the human spirit, not just the mind and the heart.

When I first took my AMI training in 1971, our trainer told us something that has always stuck in my mind. She told us that Montessori schools existed in Germany, Italy and Russia prior to World War II. After the totalitarian rulers of Hitler, Mussolini and Lenin took charge, they were all closed down. The kind of person who comes out of a Montessori-based education is not amenable to tyranny and the tyrants knew it.

Concluding Thoughts

The best research tells us that we typically use about four to twenty per cent of our brains. Have you ever stopped to think what we might be like if we used ninety or one hundred per cent of our brains, what kind of intuitions, what kind of clarity of mind, what kind of coordination between our brains, our hearts and our hands we might have? It is staggering to contemplate. Unfortunately, at our current state of knowledge, we do not know how to tap the inaccessible potential of the brain.

This information about the brain is important for parents as well as teachers, for policy makers and for companies who employ parents. We are going to get to the point where we are talking about the sensitive periods and making decisions about child care based on a clearer understanding of them. We all understand what Montessori said about dropped stitches. If you miss a sensitive period, it doesn't come back. I like to call this **the neurological imperative.** We, as a civilization have to learn this.

I always chuckle when I think of childbirth classes. While they are great, the mother and father go through months of classes to prepare to give birth to a baby and it's over in about eight to fifteen hours. Then when the baby is here, who gives them any training? We need to share this understanding about how the brain works so parents, grandparents,

nannies-everyone who cares for children has the advantage of this knowledge.

Just Enough Stimulation

We have said that environmental stimulation is very important for children. As you know, however, there can easily be too much. And, of course, that level is different for each child. The only way to discern that level is through your loving observation.

Dr. Arnold Schiebel, at the Brain Research Institute at UCLA, makes the point that specific hormones are released in the brain when we are under stress. Those hormones tend to break down neuron connections. You might have a beautifully prepared environment with lots of enrichment for children, but if the children feel pressured to achieve, the enriching results you hope for will not be forthcoming. A word to the wise is sufficient.

The brain is a marvelous thing. Its complexity and its structure determine how we think how we feel and how we move. With what we now know, we can do two tremendously important things. As we spread the word to our peers and to the parents of the children we care for, we can protect children from both the effects of inadequate stimulation and too much stimulation. We can also assist children to reach their highest potentials through a balanced program.

But we never want to forget the simplicity of it all. Loving human interaction is at the root of all human neurological development.

I leave you with one of the most wondrous lines in literature—from Little Lord Fauntleroy, by Francis Hodgkin Burnett. In it, she describes a sunny, always sweet and cheerful little boy. This is what she says about him.

"It was really a very simple thing after all. It was only that he had lived near a kind and gentle heart and had been taught to think kind and gentle thoughts always and to care for others. It was a very little thing perhaps but it is the best thing of all."

References:

1. Begley, Sharon, *"Gray Matters"*, Newsweek, 3/27/95
2. Begley, Sharon, *"Your Child's Brain,* Newsweek, 2/19/96
3. Bodrova, Elena & Leong, Deborah, *Tools of the Mind: The Vygotskian Approach to Early Childhood*, Prentice-Hall, Englewood Cliffs, NJ., USA, 1996
4. Caine, Geoffery, Caine, Renata N. and Crowell, Sam, *Mindshifts, a Brain-Based Process for Reconstructing Schools and Renewing Education*. Zephyr Press, 1998.
5. Campbell, Don, *The Mozart Effect*, Avon Books, New York, 1997
6. Chattin-McNichols, John, *The Montessori Controversy*, Delmar Publishers, Albany, New York, 1992
7. Csikszentmihalyi, Mihaly, *Flow: The*

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Psychology of Optimal Experience, Harper Collins, New York, 1990
8. Diamond, Marion, *Magic Trees of the Mind*, Touchstone Books, 1997
9. Gardner, Howard, *Frames of Mind*, Harper Collins, New York, 1983
10. Goleman, Daniel, *Emotional Intelligence*, Bantam Books, New York, 1995
11. Hart, B. & Risley, T. *Meaningful Differences*,
12. Healy, Jane, *Endangered Minds*, Touchstone Books, New York, 1990
13. Hopkins, Kevin, "*Fighting for Our Future*", Business Week, 11/94
14. Karr-Morse, R. & Wiley, S. *Ghosts from the Nursery*, Atlantic Monthly Press, New York, 1997
15. Kotulak, Ronald, *Inside the Brain*, Andrews & McMeel, Kansas City, Missouri, USA, 1996
16. Kotulak, Ronald, "*Scientists Unraveling the Mysteries of the Brain*", Chicago Tribune Special Reprint from 9/18-21/94
17. Klaus, Marshall & Klaus, Phyllis, *The Amazing Newborn*, Addison-Wesley, New York, 1991
18. Maunz, Mary Ellen, "*Help to Life, Montessori Education for Conception through Age Three*", unpublished thesis, 1984
19. Montanaro, Silvana, *Understanding the Human Being*, Cooperativa Editrice El Ventaglio, Rome, Italy, 1987
20. Montessori, Maria, *The Absorbent Mind*, Dell Publishing, New York, 1980
21. Montessori, Maria, *The Formation of Man*, Dell Publishing, New York, 1980.
22. Montessori, Maria, *The Secret of Childhood*, Fides Publisher, Notre Dame, Indiana, USA, 1966
23. Nadia, Steve, "*Kids Brain Power*", Portland Oregonian, 12/15/93
24. Pearce, Joseph Chilton, *Evolution's End: Claiming the Potential of Our Intelligence*, Harper, 1993
25. Ramey, Craig T. & Ramey, Sharon L., "*At Risk Does Not Mean Doomed*", Civitan International Research Center, Birmingham, Alabama, USA, 1992
26. Standing, E.M., Maria Montessori *Her Life and Work*, Hollis & Carter, New York, 1957
27. "*Study Finds Music Training Imprints Circuits of the Brain*," Bozeman Daily Chronicle, 10/13/95
28. Sylwester, Robert, *A Celebration of Neurons: An Educator's Guide to the Human Brain*, ASCD, Alexandria, Virginia, USA, 1995
29. Vygotsky, Lev, *Thought and Language*, MIT Press, 1986

See Also:
Picchetti, Patricia, *Sensory Awareness, Parts 1 and 2*, Infants and Toddlers, Vol 3, Nos 2 and 3.

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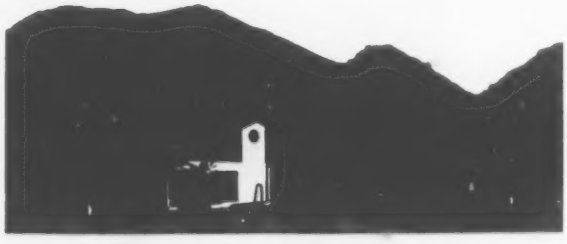

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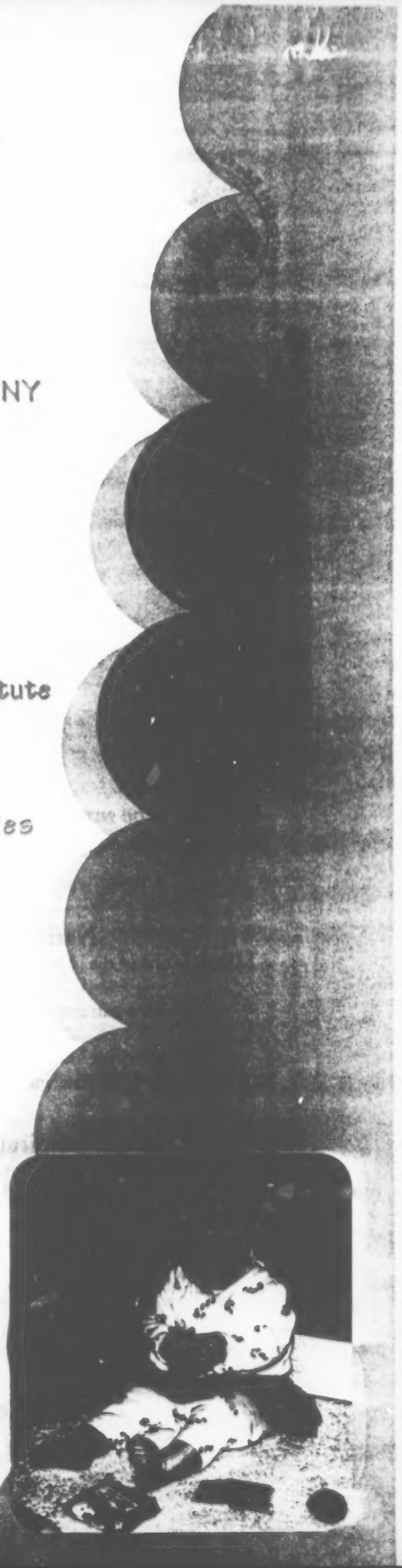

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